



Linearizing Non-linear Hypertext for SLA: Investigating anxiety in hypertext fiction with postgraduate East Asian ESL students

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ABSTRACT

Hypertext continues to be an emerging and evolving medium for language learners to practice their reading skills. Early research comparing the benefits of hypertext to paper text have shown that there was often not a clear winner, with both mediums containing advantages the other lacks (Egan et al., 1989; Landow, 1990, McKnight, Dillion and Richardson 1991). However, as technology advanced, hypertext fiction has still failed to emerge as a serious contender to paper textbooks for language learning, despite offering benefits of increased motivation, the promotion of dialogue, reflection, collaboration and identity creation (Bazinet, 2015). A frequently mentioned occurrence of hypertext reading over the years has been the anxiety of disorientation and increased cognitive load, issues that have often been researched, but have yet to deliver conclusive solutions. This study investigates if the spectres of disorientation and cognitive overload are still present in modern hypertext, and if by design, they can be reduced or eliminated. An original hypertext fiction was created with specific design measures taken to give the illusion of linearity to a nonliner hypertext. By attempting to eliminate the possibility of disorientation and cognitive overload, remaining learner anxiety could be identified and analysed. Ten East Asian postgraduate students at a UK higher education institution were asked to use the original hypertext fiction to learn language. They were given pre-task and post task level checks to confirm if they had acquired the key language points of the material, and stimulated recall was used during a post task interview to ascertain the feelings and experiences of the participants during their reading. Both positive instances of feedback and negative instances of anxiety were identified, coded and interpreted. The results suggest that while disorientation and increased cognitive load do not appear to be inherent problems in hypertext, there are still issues, such as ease of annotation, that prevent it from being preferable to paper texts for selfdirected language learners. The findings also indicated that participants could learn language effectively from hypertext, but had several preconceived ideas about hypertext fiction, and were either unaware of, or not expecting, the benefits it provided. This suggests that teachers could do more to raise awareness of hypertext fiction through increased exposure to CALL in the classroom.

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CHAPTER 1: INTRODUCTION

For those growing up in the UK in the eighties, gamebooks were a popular staple of fantasy literature. Often termed 'choose your own adventure', these books offered the excitement and challenge of *Dungeons and Dragons* style role-playing, with an introvert's preference for autonomy. They had the reader adopt the role of a hero, challenging their sense of identity. The story evolved in a branching narrative, with multiple routes resulting in multiple endings, inspiring replay. Readers flicked to various pages presented in a non-linear fashion to find out the results of their actions, and were presented with specific feedback for their choices. In language instruction, however, reading exercises from textbooks were often long, dry, and tedious for students, and also took up significant amounts of classroom time. Students needed motivating, engaging material, that challenged their sense of identity, inspired replay, and gave specific feedback. Where were gamebooks for language learners?

With the advent of the internet, the world became familiar with 'hypertext', the digital successor to gamebooks' non-linear writing style. Nodes (the pages of a website) are usually presented in a non-linear fashion that are hyperlinked together. Hypertext is described by Nelson (1987) as:

"... non-sequential writing - text that branches and allows choices to the reader, best read at an interactive screen. As popularly conceived, this is a series of text chunks connected by links which offer the reader different pathways."

(Nelson, 1987 p.0/2)

Landow (1997) offers the term 'hypermedia' to be an extension of hypertext, with audio, visual and other multimedia elements incorporated. With the ability to program elaborate non-linear electronic reading exercises that could easily include themes of identity and role-play, interactive practice activities, immediate feedback, and be accessed and completed autonomously, i.e. as self-study, why then do paper text books still remain so prolific in TESOL? In the classroom, where factors of time, space, and expense often dictate a preference of simplicity and efficiency, it is, perhaps, understandable. However, it is surprising that hypertext fiction for language learning has not become a prolific resource for autonomous learners, considering its myriad benefits.

1.1 A BRIEF HISTORY HYPERTEXT

The concept of hypertext goes back as far as the 40's, with the 'memex', a mechanized device for storing books and articles, that Bush (1945) created to organize large amounts of scientific research information. Using 'associative indexing', research items were linked together in a way that Bush claimed mimicked the human mind (McKnight, Dillon and Richardson, 1991). However, such interlinking of information was not dubbed 'hypertext' until Nelson's Project Xanadu in 1988 made reference to the entire world's literature being connected by a universal and instantaneous 'hypertext' network (McKnight, Dillon and Richardson, 1991). As computers progressed, and electronic 'hypercards' were finally replaced with webpages on the internet, the gamebooks that were popular in the late 80's and 90's began receiving the same treatment. When these too became digital, the terms 'hyperfiction' and 'interactive fiction' were coined, with Bazinet (2015) making the distinction that interactive fiction embraces aspects of gaming that are not found in hyperfiction, such as puzzle elements and interactions e.g. "pick up key", "open door" etc. However, this concept has only been applied to second language acquisition (SLA) to some degree, with McGraw-Hill Education adapting several graded readers into hyperfiction in the last decade.

1.2 LINEAR AND NON-LINEAR HYPERTEXT

A regular novel usually has a linear plot, along with a linear presentation of text. A hero begins a journey, the words, paragraphs and pages are read sequentially by the reader, concluding on the final page. Non-linearity is what is presented to the reader when accessing a website. The information users need is available in any order they choose, via links and nodes. Whereas any reader opening a text book will have expectations as to its contents, such expectations are near non-existent with hypertext, given that it is ever evolving alongside the technology that supports it (Rouet and Levonen, 1996). Beeman et al. (1987) sought to encourage non-lineal thinking in education in North America and Europe, believing hypertext could be a key player in this effort. Lineal thinking was equated to concepts of rote memorization and drill exercises still popular in Asia, whereas non-lineal thinking was equated to think in a 'non-lineal' fashion, style required a traditionally lineal approach of instruction, a paradox which Beeman et al. (1987) believed hypertext could maybe solve.

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1.3 LOST IN HYPERSPACE

Despite the encouraging promise of hypertext, its reputation has been marred consistently since its advent by the notion of readers becoming 'lost in hyperspace.' This term is ubiquitous in hypertext research, yet still has little in the way of conclusive data. It refers to the disorientation readers sometimes experience when navigating through a hypermedia network. Commonly it includes instances where readers either do not know where they are within the text, where they have been, or where they should go next. It also includes the anxiety of not being able to retrace previous steps through the network, or access previously given information in previously visited nodes. To what degree this anxiety is a user problem, or design problem, has also proved difficult to define.

Müller-Kalthoff and Möller (2006) and Hofman,Rijk et al., (1999) divide the idea of anxiety experienced with hypertext into two terms: 'disorientation' (navigational issues) and 'cognitive load' (the necessary increased mental effort required to use a non-linear and multi-media platform), and argue that both concepts interfere with a user's ability to focus, concentrate, and process information. Landow (1997) states that the term 'disorientation' is sometimes used purely for navigational hardship encountered when using hypertext systems, but sometimes used as a catch all term for any or all confusion encountered by users. Many have dismissed the concept of disorientation altogether, believing it to be simply the result of poor material design. Landow (1991) believed issues with navigation and orientation to be 'pseudo-problems', and Brown (1989) states that evidence of navigational issues within hypertext is largely 'circumstantial and conflicting'. Hofman,Rijk et al. (1999) also claim that navigational inefficiency is simply a design issue. What is frequently agreed upon, however, is that proactive measures are usually needed in the design process of hypertext material to combat the potential occurrence of this anxiety.

1.4 OBJECTIVE OF STUDY: LINEARIZING NON-LINEAR HYPERTEXT

The objective of this study is to try to ascertain if the anxiety of disorientation and unmanageable cognitive load (cognitive *overload*) are inherent to hypermedia, or if they can be eliminated through design. To explore this, an original hypertext fiction, *Business Hero*, was created with specific design measures taken to attempt to alleviate anxiety. The main principle was to use illusionary design elements to present a non-linear hypertext as if it were linear, while still retaining all the

advantages hypermedia offers. The study invited language learners to use the material, and attempted to measure both the type and degree of learner anxiety encountered, and also the type and degree of efficacy achieved when used as a language learning tool. The results also intended to provide a more detailed insight into the bias of language learners toward either print or digital self-study material. The study aims to explore the primary research question (RQ):

RQ1: Do East Asian postgraduate university students experience anxiety when using hypertext as a self-study language learning material?

The original hypertext material *Business Hero* will be used to ascertain these results, and also try to provide resolution to the subsequent research questions:

- RQ1a: What type of anxiety do the students experience when using *Business Hero*?
 RQ1b: What degree of anxiety do the students experience when using *Business Hero*?
 RQ2: How effective is *Business Hero* for the acquisition of English lexis and syntax for these students?
- RQ3: What is the students preferred media for self-study reading?

1.5 OUTLINE OF THE STUDY

The study is presented in a further five chapters. *Literature Review* provides background on theories of SLA relevant to CALL, learner anxiety, cognition, storytelling, roleplaying and self-directed learning. *Material Creation* describes some of the unique design strategies used in *Business Hero*. *Methodology* provides a systematic explanation of the testing procedure, details of the participants, and a discussion of the reliability, validity, and ethics of the study. *Data Analysis and Discussion* interprets the results of the study, before finally the *Conclusion* chapter theorizes on the implications and impact of the findings.

CHAPTER 2: LITERATURE REVIEW

This chapter aims to explore the relationship of hypertext and SLA. It provides some details of learner anxiety in hypertext relevant to RQ1,1a, and 1b. It then covers SLA theory relevant to computer assisted language learning (CALL) and how it applies to the construction and implementation of *Business Hero*. It also examines the benefits of storytelling, role-playing and narrative for SLA. These topics are discussed to provide context for RQ2. Finally, autonomous SLA is discussed in relation to RQ3.

2.1 HYPEREXT AND SLA

The pedagogical benefits of hypertext for learning language have been researched to some extent, but as opposed to paper textbooks, hypertext's constant evolution alongside technology can make it difficult to form a clear picture of its merits as a study aid. The most frequently mentioned benefits of the medium are the freedom of choice it allows the user, increased interaction and negotiation of meaning, and greater independence and learner autonomy (Bazinet, 2015; Ensslin, 2006; Neville, 2010; Rouet et al., 1996). Autonomy in education, also frequently referred to as 'selfdirected learning' describes a learner's ability to take responsibility for their own study, development and progress (Thomson, 1996). The predominant skill students practice using hypertext is reading, and it is here where the biggest gains may occur. Although it is often cited that reading from digital screens can be 20-30% slower than in print (McKnight et al., 1991), Gould et al. (1987) claim that with large, high resolution digital text, the problem ceases to be an issue. Levy and Stockwell (2006) praise reading online for its access to glossary functions and authentic communication materials, whereas Kasper (2003) claims that hypertext has the potential to be of great benefit to improve a learner's reading ability, by allowing the user to interact with the text, and goes on to state:

"Reading hypertext is a naturally dynamic, recursive, and integrated process, one that provides multiple opportunities for students to acquire, test and reframe knowledge through cognitive reconstruction of text, intertextual analysis and exposure to varied perspectives on issues. Thus, hypertext may promote increased comprehension through the elaboration and integration of new information into the existing knowledge network as readers create and expand the cognitive map that guides their construction of meaning."

(Kasper, 2003 p.29)

2.2 ANXIETY IN HYPERTEXT

Anxiety is an occurrence common to users of technology and language learners alike. Spielberger (1983 p.1) defines anxiety as "the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system". In this study, it is important to note that it is 'state anxiety', as opposed to 'trait anxiety' that was measured. State anxiety is a response to a particular stimulus, in this case, hypertext, whereas 'trait anxiety' refers to anxiety as a relatively consistent characteristic of the personality (Spielberger, 1983). There has been a wealth of clinical experience, observation, and testimonial evidence attesting to the anxiety inherent in language learning (Horwitz, 2001). Krashen's (1982) input hypothesis states language input must be comprehensible for learning to occur, and that a student's anxiety, which he terms 'affective filter' can impair this. The detriment of anxiety in language learning is described by Arnold and Brown:

"Anxiety affects the neurological conditions in the prefrontal lobe of the brain, preventing memory from operating properly and thus greatly reducing learning capacity."

(Arnold and Brown, 1999 p.2)

Heron (1989) outlines various specific sub categories of anxiety, one of which he labels 'orientation' anxiety, which describes the apprehension felt by someone not knowing what is going on around them. This anxiety can be linked to the previously stated concept of disorientation in hypertext. However, as more and more people are born into, and grow up in, an environment where computers and technology are ubiquitous, (sometimes termed 'digital natives'- Prensky, 2001), would it not be possible that these second language learners not only bypass any technological anxiety, but have their language acquisition anxiety eased through the benefits of a well-designed digital platform? Perhaps it would only be their 'digital immigrant' (Prensky, 2001) predecessors that have a difficult time being lured away from traditional paper texts. Therefore, it was decided to use 20 to 30 year old 'digital natives' in the study, to test if these anxieties still merit consideration.

Numerous studies have been done on the effectiveness of reading hypertext, with many revealing evidence of disorientation. Among the results, Gorden et al. (1988) described participants confusion with the hypertext's navigation as 'cognitive intrusion'. Foss (1989) reported disorientation of participants being unable to locate themselves in the hypertext network. Gray (1990) found participants suffered a notable lack of retention. McKnight (1990) reported participants spending more time

searching the hypertexts menu than navigating the nodes, and Rouet (1990) observed students 'looping' (returning to previously visited nodes unintentionally, often unable to progress). These factors were all deemed evidence of disorientation.

The same evidence is reported when hypertext has been used in studies of SLA. Anderson-Inman et al. (1994) experienced problems of a lack of retention among participants, but claimed that the effects of being 'lost in hyperspace' were lessened through specific attention to design features. Miall and Dobson (2001) found their test subjects tended to feel confusion during their reading, or experienced FOMO (fear of missing out) regarding unvisited nodes. Altun (2003) claimed participants perceived hypertext fiction as being lost in a maze without any end in sight. Müller-Kalthoff and Möller (2006) found that the greater navigational freedom participants had, the greater degree of disorientation they experienced. Neville, Shelton and McInnis, (2009) found that hypertext participants required more mental effort to complete their study than those using a print version (evidence of cognitive overload). Miles (2006) specifically describes these issues as anxiety, especially the problems relating to navigation and cognition.

The element that must be considered when designing hypertext to relieve anxiety in learners, then, is particular attention to navigation and user-friendliness (Kenning and Kenning, 1990). Kenning and Kenning argue that stress can be alleviated with clear, concise and comprehensive instructions, so that users always know where they are, and what is happening. They also claim that individualization of material, privacy, and feedback are other key factors that can reduce anxiety. Once identified, these common issues were considered when creating *Business Hero* for this study. By addressing these aspects and attempting to eliminate the design issues that caused them, remaining anxiety (if any) could be identified and measured in the study, in order to attempt to answer RQ1.

2.3 RELEVANT SLA THEORY AND APPROACHES TO CALL

In this section, SLA theory that influenced the creation of *Business Hero* will be discussed, and how various elements of different approaches to CALL were employed in the attempt to make it an effective language learning tool.

2.3.1 BEHAVIOURISTIC CALL

Multiple-choice and cloze questions have been easy to program on a computer for a long time, and offer immediate, if limited, feedback. As Warschauer (1996) notes, the computer can act as the teacher, and can offer limited praise or critical feedback, but can't judge. Such 'drill and kill' exercises are typical of Behaviouristic CALL, after the principles put forward by Skinner (1974), who believed that through a cycle of stimulus, response, and reward (SRR), positive behavioural patterns could emerge. These types of exercises can also be easily included in hypertext fiction. One node can present a multiple-choice question (stimulus), and allow the reader to select a hyperlink answer (response) which will take them to immediate feedback on another node. In the case of a correct answer, the node can offer praise (reward). As multiple-choice exercises are easy to program and highly familiar to students, their inclusion in *Business Hero* contribute towards maintaining a manageable cognitive load.

2.3.2 COMMUNICATIVE CALL

Communicative CALL is often seen as the successor to Behaviouristic CALL, although the two phases both overlap and are still in evidence today. Whereas Behaviouristic CALL (sometimes referred to as 'structural' or 'restricted' CALL) is rooted in Behaviourism theory, Communicative CALL is rooted in Constructivism. Constructivism is the philosophy of understanding that learning is constructed socially and with interaction, and also that people learn through exploration, and ultimately construct their own knowledge and understanding (Dalgarno, 2001; Levy and Stockwell, 2006). Johnson (1989) and Seedhouse (1995) try to define the communicative nature of its activities as inspiring interaction, either by presenting an information gap, asking students to utilise information they have been given, or simply that the language being practiced is useful to students outside the classroom. *Business Hero* asks students to remember and carry across information to solve problems on later nodes, creates interaction through role play with characters within the hypertext fiction, and is set in an authentic domain (situation) that would be useful to overseas students.

2.3.3 SOCIOCULTURAL THEORY

Current software has the ability to inspire users to interact with text through multimedia images, audio and video, and is advanced enough to analyse, and adapt to its users. It can also inspire more communicative activities such as discussion and debate. Vygotsky's sociocultural theory supposes that through social interaction, learners can achieve more than they could alone, with cognitive development taking place first on a social level, before that of an individual level (Vygotsky, 1978; Levy and Stockwell, 2006; Warschauer, 2005). Social interaction is treated as a core foundation of language learning, rather than a support (Zuengler and Miller, 2006). This theory is made clear with Vygotsky's 'zone of proximal development' (ZPD), which explains to what extent learners can do themselves, and what they can learn with assistance (Fig. 1).

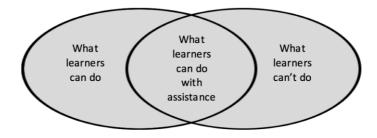


Figure 1. Representation of the ZPD

A modern hypertext can assist learners by providing them with an array of interactive scaffolding (linguistic support) that can provide this assistance, such as glossaries and audio pronunciation guides, making it a more effective learning tool.

2.3.4 SOCIAL COGNITIVE THEORY

Technology and SLA both present people with experiences that can cause anxiety. Bandura's (1994) social cognitive theory claims, however, that the mastery of these experiences, through guided instruction, can lead to changes in coping behaviour, strengthening a person's ability to deal with anxiety. When creating these experiences, Bandura argues, one must create situations where those suffering from anxiety can successfully achieve their goal despite themselves and the frequently debilitating anxiety that may occur. The length of time is also important, as learners are more likely to be able to deal with anxiety for shorter periods than prolonged ones. Therefore, the design of the material used in this study drew upon these ideas of keeping the task brief, and providing several key coping mechanisms.

2.3.5 COGNITIVE LOAD THEORY

Cognitive load theory suggests that many of the tasks asked of students, that are not directly related to the field of the topic they are studying, are frequently above their capacity to process, and significantly affect their ability to learn (Sweller, 1990). Due to the multimedia elements and unfamiliar navigation presented in hypermedia, readers are asked to exert a greater mental effort than they would using a paper text, and this extra cognitive load may often lead to the anxiety of 'cognitive overload'. Navigating non-linear hypertext likely places a greater strain on a user's cognitive system than its paper counterpart (Nowak, 2008; Shapiro and Niederhasuer, 2004). Often readers of linear text find they are asked to remember a fact or development from a previous page, and can easily skip back to re-read. However, when navigating non-linear hypertext, users are asked to store more of this information in their memory, as in order to revisit an earlier point, they would need to attempt to remember which node they had visited, how to navigate back there, while also considering the alternative choices of which nodes to visit in order to progress. Chandler and Sweller (1991) argue that often the demands on a reader's memory are greater than its inherent limitations, and this can severely impede learning. Rouet et al. (1996) state that hypertext comprehension is a 'multilayered cognitive activity' in which users can be overwhelmed by the wealth of information they are being asked to process. It was therefore important to consider all the multimedia opportunities hypertext could include, and also to consider using them sparingly in a way that keeps usability simple, and reduces cognitive load.

2.4 DIGITAL STORYTELLING AND SLA

Interactive fiction has other aspects that carry across into useful SLA pedagogy: role play and narrative. This section discusses some of the considerations when creating effective digital storytelling (DST). DST through the hypertext medium can have advantages over regular narratives by adding an increased range of interactive media, such as audio and visual elements that promote the advancement of technical skills (Thang et al., 2014). Thang et al. (2014) also note that the price for these advantages is often increased research, writing, storyboarding and technical support.

2.4.1 ROLE PLAY

Role play is a staple activity of language learning. Structured rehearsal is invaluable for providing language learners with the confidence required to enter the situation in reality. Role play is easy to set up, highly motivating, and promotes the use of language. It also teaches many interpersonal and cultural skills, that allow participants to consider and empathize with other perspectives (Van Ments, 1999). Chesler and Fox (1966) add that it also allows for immediate feedback, the expressing of emotions, and the changing of attitudes. Role play has been proven to aid the acquisition of language and promote spontaneous production (Paulston et al., 1975; Scarcella, 1978). It can boost motivation, engagement, and confidence (Ladousse, 1987). In the classroom, role play is most commonly thought of as an oral production activity for fluency, and better suited to the purposes of consolidating new language than for teaching new language. It allows students to practice conversational techniques that will ultimately help them achieve a task (Van Ments, 1999). However, in hypertext fiction, the role play can run along the entire course of the narrative, engaging readers from the first page. It was therefore decided to take this approach when designing *Business Hero*, and set the narrative as a role play in the second person, as gamebooks often do.

2.4.2 NARRATIVE

Narrative and storytelling also have numerous benefits for SLA. Narrative in a text book, as opposed to non-fiction prose, shares elements of natural informal speech, such as grammar and register (Biber et al., 1999; Labov, 2010). According to Segalowitz (1976), these familiarities can reduce anxiety among learners. Murray (1997) claims narrative can provide a sense of purpose and motivation normally supplied by the teacher. Brockmeier and Carbaugh, (2001) and Bamberg (2010) agree that the use of narrative in SLA can resonate with learners' concept of identity, and that by connecting with, and reflecting on, characters in a story, there is also meaningful reflection on dialogue and language. Lave and Wenger (1991) draw attention to the importance of the context and cultural linguistic clues users gain while interrogating the narrative in lessons. Merseth (1996) states that for hypertext to be a useful study tool for second language learners, it must have a relatable content and purpose, achieved by creating an authentic domain with multiple viewpoints.

By including a range of effective practice exercises and storytelling techniques, *Business Hero* hoped to be both an engaging and effective language learning tool, in its effort to answer RQ2.

2.5 LEARNER AUTONOMY

Godwin-Jones (2011) claims that one of the most pressing imperatives of CALL is to encourage learner autonomy (taking control of one's own learning). However, learning autonomously does not equal learning alone, as it is still important for teachers to demonstrate, guide, and facilitate the use of technology and the material it presents. In a hypertext environment designed to be used purely autonomously, an 'instructor' must still exist in the program, performing these same duties. Although it may take many forms, the software itself may now be responsible for these duties.

A hypertext learning environment may offer a much greater opportunity for learner control and autonomy than linear texts could. Murray (1997) states that the wide range of learner choice and independence required makes hypertext the perfect platform for autonomous learning. However, McKnight et al. (1991) argue that rather than determining their own path, students will still follow the path laid out by the author of the material. To allow for effective feedback, there would naturally often be a 'golden path' even through non-linear text, that provides users with the author's intended best outcome. The focus of language role play is invariably on how to make the correct decisions in the situation. Time constraints and the possibility of introducing interference are just some of the issues that prohibit language instructors from delving into the consequences of a wrong decision. However, a non-linear hypertext narrative could offer these alternatives to the curious learner, but whether they would choose to explore it rather than aim for 'success' at every juncture, is debatable. Kenning and Kenning (1990) claim that CALL is able to provide learners with choice and autonomy, but the text should make recommendations or suggestions that will prompt users into using successful cognitive strategies. These prompts can be followed or ignored at the user's discretion, but nevertheless imbue the text with a sense of purpose and direction while still leaving the user open to self-directed learning. Murray (1999) emphasises that technology can, at the very least, allow the language learner to study at a pace that suits them, heighten the enjoyment of the study and potentially lower anxiety.

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Business Hero was therefore created with a 'golden path', but also created with multiple scenarios, endings and directions, to allow for greater learner choice that could be investigated at the user's leisure. By attempting to include all the benefits of a paper text, and by adding more room for movement and curiosity within the hypertext, the study could hopefully challenge any preconceived preferences students have for self-study using paper textbooks, and answer RQ3.

2.6 RELEVANCE TO BUSINESS HERO

Business Hero was designed considering all these issues, and was intended to be an effective and modern hypertext for SLA. It was designed to specifically avoid heavy cognitive load and disorientation, and focused on including:

- 1) An extremely clear and user-friendly navigational interface, preferably with some sort of cognitive map that readers can use for guidance and reassurance.
- 2) An engaging narrative, set in a well-researched, familiar domain.
- 3) An inbuilt 'teacher' to provide instructions, scaffolding, feedback and facilitate interaction.
- 4) Multimedia features that capitalize on the potential of modern technology.
- 5) Multiple non-linear story options to explore.

CHAPTER 3: MATERIAL CREATION

In order to test if the occurrence of disorientation or cognitive overload was still present in hypertext, it was necessary to create material specifically designed to eliminate both features to as great a degree as possible. *Business Hero* was designed to meet the following criteria:

- It needed to function as an effective TESOL textbook, that could be used either autonomously or in a classroom, and adequately demonstrate that it could facilitate the acquisition new English vocabulary and grammar.
- 2) It needed to be an indisputable example of non-linear hypertext. The text had to be non-linear, and have a multi-branching narrative structure that could adequately test whether technology and design has improved to the point where the potentially confusing nature of its navigation can be nullified.
- 3) It needed to present readers with a greater cognitive load than would be presented in a regular ESL paper textbook. The text had to contain multimedia abilities that paper texts could not replicate, and require the carry over and preservation of knowledge from one node to the next. This is so it could be adequately tested to see if technology and design has improved to the point where the effects of increased cognitive load can be nullified.

3.1 LINEARIZING THE NON-LINEAR

In a standard English language paper text book, there is little that can be done to manipulate the reader. The reader will progress at his/her chosen pace, with all the exercises and instructions being presented transparently. Success is usually measured by checking the answers to exercises at the back of the book, and the reader determines if they feel comfortable progressing to the next chapter. The opportunity exists in hypertext to introduce misdirection and illusion, albeit not in a malicious way, but in ways that help the reader succeed, learn, and reduce anxiety. This section looks at the common hypertext issues previously discussed, and which specific design elements were employed to combat disorientation and cognitive overload. If successful, neither of these issues would arise significantly in the post task interview, despite giving participants clear opportunities to acknowledge them.

3.1.1 TECHNIQUE 1: THE ILLUSIONARY MAP

A common assumption is that a clear contents page or network map should be provided to readers in order to relieve anxiety. However, by looking at the map of Business Hero (Appendix 8), which is a relatively simple non-linear text compared to many that are available, it would likely cause *more* anxiety to a reader that needed to interpret it. Even becoming aware of the sheer number of pages in the Business *Hero* sample chapter (275) might make a reader hesitate from beginning it. In reality, any reader attempting the text would most likely only visit a fraction of those nodes. Although, if the journey appeared to be linear, whilst retaining its non-linear structure, perhaps the best of both worlds could be achieved: the reader would know (or *think* they know) where they are, where they have been, and how long it would take to reach the goal, whereas in reality, there could be several goals, with several paths to reach them. This was achieved by placing a 40-rung progress bar at the top of each node. Each node exists on a rung from one 1 to 40, showing the progress of the reader (Fig. 2). Even though, for example, there are 12 possible story nodes on rung 22, they all show one rung of progress from rung 21. The reader always knows how far they have to go until the chapter reaches a conclusion.

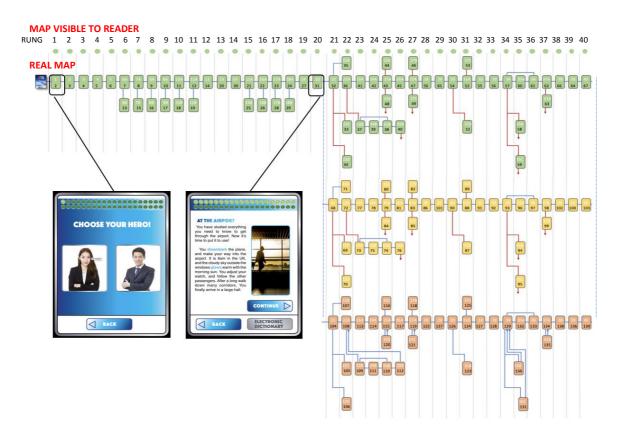


Figure 2. Business Hero's rung system navigation bar.

3.1.2 TECHNIQUE 2: ILLUSIONARY BACKWARDS NAVIGATION

As feedback is one of the most crucial elements of a student's success (Hattie, 2011; Hattie and Yates, 2013), multiple branching narratives were created to reflect many possible choices within the domain, from positive to dire, resulting in three possible endings to the story to act as overall feedback. Once the nodes for any particular story path were written, they could easily be copied or altered for the alternative paths. However, there were drawbacks that came with each new duplication of the path. The workload multiplied heavily each time the path was duplicated in terms of hyperlinking each node to its new destinations, and also organizing it efficiently. Therefore, it was decided to keep the paths through the text limited to three: these were referred to as the green tier (the previously mentioned 'golden path', with no mistakes by the reader) leading to a poor ending (Fig. 3). A poor choice by the reader might 'drop' them onto a lower tier, and a different ending.



Figure 3. Business Hero's multiple paths and endings.

For simplicity and familiarity, *Business Hero* follows a presentation-practiceproduction (PPP) cycle over five stages. New vocabulary is presented and practiced in stage 1, grammar in stage 2, and then stages 3-5 have readers role play through the narrative of arriving at a UK airport, clearing Immigration, Baggage Claim and Customs respectively, with choices to be made in each area. There needed to be consequence to the actions taken by the reader, but how to administer the feedback at each decision became problematic. During the production phase of the PPP cycle, when fluent reading needed to be encouraged, correction should not be immediate (Harmer, 2015), but rather saved until the end of the activity. If the feedback encountered with each decision along the path was too severe, or demotivating, readers would most likely stop, back track, and reattempt. This would mean they would avoid facing the consequences of their decisions, essentially being able to 'turn back time' on each mistake. Therefore, the decision was made to have the backward navigation sometimes become an illusion, letting readers believe they were returning to the previous node, but in reality, taking them to an identical node on a lower tier path, one that logged their mistake, and took them to a different ending. This way, the reader's reading fluency would not be interrupted, and they would still face the consequences of their choices, but that would only become clear at the end of the path. This would hopefully lighten cognitive load during reading, allowing readers not to worry about their choices, but later inspire curiosity and motivate students to re-read in the hopes of achieving the perfect ending.

3.2 SCAFFOLDING

This section describes some of the other features employed as scaffolding to aid the experience of the reader. To avoid unnecessary cognitive load, the features were made to be as clear, simple, and intuitive as possible. Buttons and text were large, and prose was kept brief on each page. Audio elements were included, but not excessively. Pictures were common and bright, there was plenty of white space, and a bold simple colour scheme.

The false backward navigation feature *Business Hero* employed proved difficult to marry with the idea that, on occasion, to test reading comprehension, it was important to ask readers to carry across information they had read in an earlier node to solve situations later in the text. For example, in one instance, readers are told their character has allergy medicine in their luggage, but no tax or duty-free items. Later they must remember or use this information to tell the customs officer that they have no items to declare. However, to reduce anxiety and cognitive load, there had to be the ability to backtrack easily to the information (just as one might flick back to the page in a book) without consequence or punishment. Therefore, this information is strategically placed to allow the reader to back track and reread without incurring the penalty of dropping onto a lower tier of the text.

To support and reassure readers further, every page where language was potentially confusing has a link to a glossary feature (called 'electronic dictionary' in the text, as this is a more recognisable term for East Asian students at B2-C1 level) to help with any language issues. Here, both the key language items and additional language items that may potentially be unknown (highlighted in the text in blue) have dictionary definitions and examples of usage.

The immediate feedback the hypertext allows, and the audio features, both exceed the abilities of a paper text book. In a paper book, students would have to check their answers themselves if learning autonomously, usually at the back of the book, to see if they were correct. They essentially get one chance to answer correctly, before being given the answer. In hypertext, students can take multiple tries without having the answer 'spoiled', and can also be prompted by the text, much like they might be by a teacher in the classroom. This scaffolding allows for a greater implementation of the ZPD than a paper book could provide. Also, the audio elements integrate naturally within the text, without having to attach a CD at the back, or access a website. Hypertext can be as much a listening experience as a reading one.

3.3 APPLICATION TO THE STUDY

Through these methods, *Business Hero* hopes to be both pedagogically effective, and successful in reducing and/or eliminating the anxiety of disorientation and cognitive overload. It should then help users focus on, and articulate more clearly, the areas of hypertext that still cause anxiety, or prevent it from being a preferable alternative to the paper text. More details on the design, construction and functions of *Business Hero* can be found in the *Business Hero user guide* (Appendix 9).

CHAPTER 4: METHODOLOGY

This chapter outlines the procedure that was taken to collect data. It will cover the research approach, the selection process of the candidates who participated in the study, a step by step guide on how the data was collected, how the data was analysed, a discussion on the study's reliability and validity, and finally, a review of its ethical considerations.

4.1 RESEARCH APPROACH

Before collecting data, it was important to define the approach to the study, and the role of the participant and administrator within it, to ascertain how to acquire the most valid, reliable and relevant results. As the study proposed to uncover the behaviour and feelings from a limited number of specific cultures, it was decided that data should be collected ethnographically. Ethnography is "the study of people's behaviour in naturally occurring, ongoing settings with a focus on the cultural interpretation of behaviour" (Watson-Gegeo, 1988 p.576). In this study, the primary means of data collection was to observe foreign language students using hypertext as they would in their everyday life. For greater depth of understanding, data would be collected through mixed methods for data triangulation. Denzin (1978 p.291) defines triangulation as "the combination of methodologies in the study of the same phenomenon". This study used a quantitative method for the level check, and qualitative methods of semi-structured interview and observation for the material.

In ethnographical research, it is important to consider the difference in approach from the perspectives of both the participants and the researcher. The terms 'emic' and 'etic' derived from Pike's (1964) original uses of distinguishing 'phonemic' from 'phonetic' in linguistics, and are used to describe the contextual viewpoints of the participant and researcher (Watson-Gegeo, 1988). Watson-Gegeo elaborates:

"... the emic or culturally specific framework used by the members of a society/culture for interpreting and assigning meaning to experiences differs in various ways from the researcher's ontological or interpretive framework (an etic framework)."

(Watson-Gegeo, 1988 p.579)

Therefore, it was important to consider that participants may have approached the study from a different contextual and cultural standpoint, one different from the researcher, which could impact the validity and reliability of the study. As

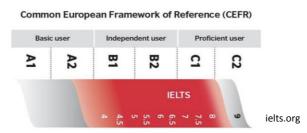
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participants were postgraduate students, they may have wanted the researcher's study to 'succeed', or may have wished to protect the researcher's feelings by not being negative about some aspects of the material. To attempt to align the researcher's and participants framework for the study, participants were clearly told the purpose of the study, which was not to evaluate the material, but to be aware of their feelings while using it, and that both positive and negative feelings were important for results to be relevant. Also, participants were not told who created *Business Hero*, unless they specifically asked (See *4.6 Validity and Reliability*).

4.2 PARTICIPANTS

Eleven candidates were invited to participate in the study. The data from participant India was excluded from the data pool due to misuse of the material, leaving a total of 10 participants. Candidates were all postgraduate students who spoke English as a second language, and who studied at the selected university. All participants were from East Asian countries, with an English ability between B2 and C1 level of the Common European Framework of Reference for languages (CEFR). This was established by two means:

 All participants were postgraduate students at a selected university, which had an IELTS[™] (International English Language Testing System) score entrance requirement of 6.0 with a 5.5 in each skill. This is comparative to B2 on the CEFR scale (Fig. 4).





2) As well as containing the key language points (KLP) from *Business Hero*, the pre-task and post task level check (Appendix 1) also included vocabulary and grammar items ranging from A1 to C2, categorized using CEFR identifying software on the *English Profile* website. Any participant failing to answer the A1 and A2 questions correctly would have been omitted from the study. Also, any participant who answered both the C2 questions correctly *and* answered all the KLP questions correctly, would also have been omitted.

Despite this condition, all participants scored appropriate results to use the material, and none were omitted due to level check scores (See Tables 3 and 4 in *5. Data Analysis and Discussion*). According to Bazinet (2015) and Ensslin (2006), intermediate (i.e. CEFR B1-B2) and advanced (i.e. CEFR C1-C2) students are more suited to using hypertext material, as they are better equipped to handle the narrative complexities of the genre and the increased cognitive load. Participants were a mix of genders, aged 20-30. East Asian students were used as they form the majority of this researcher's 10-year experience as a language instructor, and therefore the material could be more easily created to focus on themes that would be the most pedagogically beneficial. Table 1 shows participant information, including preferences to either classroom or self-study, digital or paper material, and previous experience with digital ESL material:

	PARTICIPANT ALIAS									
	ALPHA	BRAVO	CHARLIE	DELTA	ECHO	FOXTROT	GOLF	HOTEL	JULIET	KILO
GENDER (M/F)	F	F	F	F	F	F	М	F	М	М
AGE	23	24	25	26	28	23	25	25	29	24
NATIONALITY	Chinese	Chinese	Chinese	Chinese	Chinese	Chinese	Chinese	Chinese	Japanese	Chinese
PREFERENCE OF CLASSROOM STUDY (CS) OR SELF STUDY (SS)	SS	SS	SS	SS	SS	SS	50/50	SS	SS	SS
PREFERENCE OF PAPER (P) OR DIGITAL (D) ESL MATERIAL	Ρ	Ρ	Ρ	Ρ	D	Ρ	D	Ρ	Ρ	Ρ
PREVIOUS EXPERIENCE WITH DIGITAL ESL MATERIAL (Y/N)	N	Y	Y	Y	N	Y	Y	N	Y	Y

Table 1: Participant information

4.3 DATA COLLECTION

Data was collected in five phases. All five phases were performed consecutively over a 90-minute period, in a private and controlled environment on campus at the selected university using an iPad. Sessions consisted of only the researcher (hereto referred to as 'the administrator') and the participant. The 10 participants each attended a session at some point over the course of two weeks (May 17 - 30, 2018), used the same material, and participated under the same conditions. First, participants were given the pre-task level check (Appendix 1) to complete, followed by a brief pre-task interview (Appendix 2). They were then asked to complete the sample chapter of *Business Hero* at their leisure. After completing the chapter, they took the level check again, and finally took part in a semi-structured interview (Appendices 3 and 4). In the following section, each step will be covered in detail.

4.3.1 PRE-TASK LEVEL CHECK

Participants were first asked to complete the 16-question interactive pdf. level check on an iPad (Appendix 1). Ten minutes were allocated for its completion, although it was expected not to take more than five minutes. Participants were asked to select one answer for each question by tapping one of the four interactive check boxes by each option, and to return the iPad to the administrator once they were happy with their answers. The results were tallied automatically and recorded, and a screen shot of their completed test was taken. Participants were not permitted to know the correct answers of the level check at this point, but could know their score if they asked. To make the level check fast, efficient, and to not cause too much anxiety to participants, only 16 multiple choice questions were made. Eight questions tested grammar, ranging from beginner level to advanced, the eight other questions were vocabulary. Included in these questions were the seven key language points (KLP) the material introduces (purpose, visa, claim, carousel, declare, inspect and the future progressive tense), and other ancillary language items from CEFR A1 to C2 level (See Appendix 1). This step was to ensure participants English ability was suitable to use the material, and that they were unfamiliar with some of the KLP that the material was designed to teach.

4.3.2 PRE-TASK INTERVIEW

Participants were then asked the five questions from the semi-structured pre-task interview (Appendix 2). The interview was audio recorded, and was allocated 10 minutes to complete. This step was to find out participants' pre-existing bias toward either paper or digital textbooks for language learning. The results can be found in Table 1 (See *4.2 Participants*) and Appendix 7.

4.3.3 TASK: BUSINESS HERO: BUSINESS TRIP

Participants were then given a copy of the original hypertext material *Business Hero: Business Trip* sample chapter on the iPad. When piloted, students typically took between 10-15 minutes to complete the chapter. Twice that time (30 minutes) was allocated for participants to complete it, so they could be told to take their time and complete it at their leisure. As screen recording could not log touch-screen key-presses, and it was not necessary to record time-stamped key-presses, it was discovered with pilot participants that it was more effective for the administrator to unobtrusively observe the participants interaction with the material instead, making

notes of path selection, decisions, correct and incorrect answers, and any problems encountered. Participants were informed that the administrator would not interfere, unless technical assistance was requested. Participants were only told three facts about the material in preparation before being asked to use it autonomously:

- 1) The text contained multiple endings depending on the choices made.
- Pages contained an 'electronic dictionary' glossary feature that would help with any language difficulties.
- 3) How to recognise the audio elements.

Participants were then left uninterrupted until they finished the material, which instructed them to return the iPad back to the administrator at its conclusion.

4.3.4 POST TASK LEVEL CHECK

Participants were then asked to complete the level check (Appendix 1) once again. The time allocation was the same as before (10 minutes), and similarly, their results were recorded once they were happy with their answers. The pre-task and post task level checks were identical, and the results were later compared against each other to ascertain if the new language had been taught effectively and retained, to measure the language learning effectiveness of the material.

4.3.5 POST-TASK INTERVIEW

In the final phase, participants were asked to take part in a longer semi-structured interview (Appendices 3 and 4). Thirty minutes were allocated for this section. During this interview, participants were provided with stimulated recall by being shown the path they took through the material once again. O'Brien (1993 p.215) states that both the 'stimulated recall' and 'think-aloud' techniques can offer valuable insight to what participants are thinking, but that the think-aloud protocol can create "an unacceptable level of interference" while performing the task. Therefore, stimulated recall was preferred, as it did not interrupt participants use of the material. The interview prompt sheet (Appendix 3) was kept visible on a monitor throughout this phase. It was implemented to help participants focus on the purpose of the interview, and help them articulate their positive and negative feelings about using hypertext material for SLA. At the end of each of *Business Hero*'s 5 stages, they were asked their feelings, to assign their feeling to an aspect of the material, and to rate the intensity of their feeling using the prompt sheet.

Participants were solely responsible for selecting the adjective used and for rating their strength of feeling, to reduce any bias from the administrator. If participants offered their own rating term, e.g. 'absolutely', they were asked to reclassify it on the prompt sheet's blue scale (*a little, moderately, very* or *extremely*) for consistency of results. To provide greater contextual detail, additional questions were asked to 'thicken the description' (Dawson, 2012). Clark, Nguyn and Sweller (2006 p.22) claim that when describing cognitive load, self-estimates by participants are effective, and "the most pragmatic way to assess mental effort". After the stimulated recall, the final five questions from the post task interview were conducted (Appendix 4). The entire semi-structured interview was audio recorded. Although 120 minutes were allocated, each participant had concluded the study under the approximated 90 minutes (Fig. 5).

Phase of study	Pre-task Level Check	Pre-Task Interview: Questions 1-5	Reading Task: Business Hero	Post task Level Check	Post task Interview: Stimulated recall	Post task Interview: Questions 6-10
Approximate duration of phase:	10 minutes	10 minutes	30 minutes	10 minutes	20 minutes	10 minutes

Figure 5. Timetable for each participant of the study

4.4 DATA ANALYSIS

The scores of each participant's pre-task and post task level check were analysed, tabulated, and compared. Scores were recorded both as overall scores (of all 16 questions on the level check), and as KLP, comparing only the seven language points on the test that the task was designed to teach. Mean and standard deviation were calculated and tabulated to represent the effectiveness of *Business Hero*. Interview audio data was transcribed and coded, and analysed, with grids used to display commonalities that participants identified regarding the material. Voluntary feedback responses were separated into positive instances (categorized as evidence of efficacy), and negative instances (categorized as evidence of anxiety or dissatisfaction). Participants rankings of their feelings (using the scale on the prompt sheet – Appendix 3) were assigned a numerical value 1–4 to allow for a cumulative score:

A little	= 1
Moderately	=2
Very	= 3
Extremely	= 4

Each instance of feedback was coded. For example, if a participant noted a feature of the material made them feel 'motivated', it would be assigned as a positive feature. If the participant ranked it as 'extremely', it was assigned a score of 4. For example: A-1-NAV-4-motivated equates to A=Alpha participant, 1=Stage 1, NAV=Navigation, 4=Extremely, motivated=adjective used to describe feeling. The number of voluntary positive instances were recorded and scores totalled to represent the most effective features of the material according to the participants experience. This feedback was interpreted to ascertain the effectiveness of the material as a language learning tool, to answer RQ2. Likewise, negative instances were identified and coded into three categories of either 'disorientation' (pertaining to any anxiety experienced due to navigation), 'cognitive overload' (pertaining to any anxiety experienced due to other aspects of the material's design) or 'dissatisfaction' (pertaining to any negative feelings other than anxiety). Number of instances were recorded and scores totalled to represent the most common causes of anxiety encountered with the material, answering RQ1, 1a and 1b. Finally, pre-task and post task interview answers were compared, interpreted and discussed to answer RQ3.

4.5 VALIDITY AND RELIABILITY

LeCompte and Goetz (1982) state that the value of any conducted research is partly dependant on the proven credibility and authenticity of its methods. Credibility of findings can be ascertained by the method's adherence to the concepts of validity (which measures how well the test or procedure achieves what it sets out to accomplish) and reliability (which measures how well a test or study can be replicated).

4.5.1 VALIDITY

The validity of a test or study is established by how accurately it measures the task it was designed for. Davies et al. (1999) state that this often means imposing a tangible measurement to an otherwise abstract concept, and how well that is achieved. In this study, the abstract and multi-faceted concept of anxiety had to be given a valid measure. *Business Hero* could be argued to have high construct validity, in that it is a clear example of non-linear hypertext, and thus, a valid construct for the observation of the concepts of disorientation and cognitive load. In the same way, it has good content validity, as it contains the necessary elements to ascertain the degree of anxiety the study is intending to measure (e.g., non-linear navigation and increased cognitive load). The difficulty concerning the validity of the study as a whole is perhaps the semi-structured interview, as the participants maybe lacked the ability to conceptualize and articulate the effects of disorientation and cognitive overload in a second language. This required a balance of providing language structures to help them recognize and vocalize these effects, while not putting words in their mouths. This is why the semi-structured interview used a prompt sheet (Appendix 3) to increase the validity of the study.

4.5.2 RELIABILITY

A strong indicator of reliability is a high level of agreement between either the results of a similar or identical study, or with those of itself (Heaton, 1975; Davies et al., 1999). This study was designed to be replicated easily in a similar context with access to East Asian students, provided the same version of *Business Hero* was used, and the same level check and interview questions were used. To increase reliability and reduce measurement error, interview questions were scripted, and additional questions were only added when necessary to thicken the interview data. Measurement error is the term that describes the issues that affect accurate measurement of language assessment (Davies et al., 1999). Potential errors affecting this study, for example, were each individual's health and fatigue at varying points throughout the day. Although anxiety was being measured in participants' use of the material, any other anxiety needed to be reduced or eliminated. Therefore, safe, familiar surroundings were provided, and no strict time limits were given to them. There was no inter-rater bias, as the administrator was the same throughout all sessions, but there was the potential of bias from the participants being asked to evaluate material. It is human nature to overlook flaws and think too favourably on creative projects that cause emotional harm to their creator. As mentioned previously (4.2 Research approach), to reduce this bias, participants were not told who designed the material unless they specifically asked, and even in those cases, each participant was told that the purpose of the study was to ascertain both the positive and negative elements of the material in order to be relevant. Overall there were no unique aspects of the study that could not be easily replicated given access to the intellectual property, lending the study a high level of reliability.

4.6 ETHICS

This study conformed to the guidelines of the General University Ethics Panel (GUEP), and received their approval. A general invitation was posted through social media used by postgraduate students at a university in the UK, containing an information sheet detailing the requirements of the study (Appendix 10). The invitation clarified the stipulation for East Asian students between B2-C1 level of English as a second language. A series of two-hour time slots were reserved in the University's private study rooms, and participants were invited to undertake the study on a first come, first served basis, through reservation of these time blocks. Refreshments, and the opportunity for what would essentially be a free English lesson (from the time spent with the material), were used as incentives. Participants identities were offered confidentiality by the administrator, and anonymity from all other third parties with the use of an alias from the phonetic alphabet. All participants read and signed a consent form (Appendix 11) before taking part in any stage of the research, which confirmed their results would be kept secure in the university's digital BOX storage, not kept, shared or made accessible with any third party, and that they had the right to cancel or stop at any time, and the right to ask for their results and information to be withdrawn for up to two weeks after their participation.

CHAPTER 5: DATA ANALYSIS AND DISCUSSION

This section introduces and analyses the data resulting from the study in three parts, to answer the research questions the study presented in its introduction:

- RQ1: Do East Asian postgraduate university students experience anxiety when using hypertext as a self-study language learning material?
- RQ1a: What type of anxiety do the students experience when using *Business Hero*?
- RQ1b: What degree of anxiety do the students experience when using *Business Hero*?
- RQ2: How effective is *Business Hero* for the acquisition of English lexis and syntax for these students?
- RQ3: What is the students preferred media for self-study reading?

Firstly, instances of negative feedback from the post task stimulated recall and semistructured interview will be analysed and interpreted, to determine if anxiety was encountered using the text, what type, and to what degree. This will be done in an attempt to answer RQ1, 1a, and 1b. Secondly, the efficacy of *Business Hero* as a hypertext SLA learning tool is analysed and discussed using the statistical data from each participant's pre-task and post task level check. Relevant instances of positive feedback from the post task stimulated recall and semi-structured interview will also be interpreted and discussed to determine other factors that made the hypertext medium appealing and effective for language learners, in an attempt to provide answers to RQ2. Finally, answers from both the pre-task and post task interviews will be compared to explore RQ3.

5.1 EVIDENCE OF ANXIETY

To answer RQ1, 1a, and 1b, participants were asked their feelings about each of the five stages of *Business Hero*, using the prompt sheet (Appendix 3) as necessary. Throughout the stimulated recall section of the post task interview, there were 31 instances of voluntary negative feedback from the 10 participants, and four observed instances of anxiety by the administrator. A complete table of instances from this section can be found in Appendix 6.

Participants ranked the degree of their feelings (using the fixed scale on the prompt sheet – Appendix 3) and they were assigned a numerical value 1 - 4 to allow for a cumulative score:

A little	= 1
Moderately	=2
Very	= 3
Extremely	=4

Instances were coded by participant, stage, degree of feeling, and adjective. For example: *B-2-NAV-4-confused* represents B=*Bravo* participant, 2=*Stage* 2, NAV=*Navigation*, 4=*Extremely*, confused=*adjective* used to describe feeling. Any instances specifically referring to navigation were designated as evidence of 'disorientation'. Instances referring to the material design were separated into examples of 'cognitive overload' and 'dissatisfaction'. This was done by examining the adjectives used by the participant, and their elaborations. Adjectives such as *confused*, *tired*, *stressed* were designated examples of 'cognitive overload'. Others, such as *dissatisfied*, *bored*, *unhappy* were grouped as *dissatisfaction*. In each case, the elaborations of the participants during the interview were used to double check the designations were appropriate. Total negative instances, observations, and scores are shown in Table 2.

INSTANCES OF NEGATIVE FEEDBACK									
	Aspect	Carla	Observed	Spoken	Score				Total
	of material	Code	instances	instances	1	2	3	4	score
DISORIENTATION	NAVIGATION	NAV	2	2	1	1	0	0	3
COGNITIVE OVERLOAD	MATERIAL DESIGN	MD	2	9	4	4	1	0	15
LANGUAGE MATERIAL DESIGN ELECTRONIC DICTIONARY PACING	LANGUAGE	LANG	0	10	4	4	2	0	18
		MD	0	7	6	1	0	0	8
		ED	0	2	2	0	0	0	2
	PAC	0	1	0	1	0	0	2	

Table 2: Instances of negative feedback

5.1.1 DISORIENTATION

There were only two instances of negative feedback regarding the navigation of the text, and two observed instances. Most participants progressed smoothly along a path they seemingly believed to be linear.

In one of the observed instances, Charlie experienced a technical glitch where an incorrect answer option skipped a page, and took her to a correct answer feedback page instead. This was seemingly due to her excessive finger pressure on the iPad, causing the hyperlink to malfunction slightly (taking her to the subsequent node, which in a non-linear text is meaningless, instead of taking her to the correct node). On subsequent tries with a lighter touch, the material operated as it should. Nevertheless, this disconnect was still enough to be a memorable part of the experience, which she described in the post task interview had made her feel "moderately nervous". Charlie felt as if the wrong button had been pressed, whereas in fact the correct button had been selected, but the feedback did not correctly relate to her choice. This was a drawback of either the iPad's touch sensitivity, or the PDF reader (or both), and resulted in mild anxiety.

Delta also referred to being nervous from simply selecting a wrong answer during the vocabulary practice stage, and having to navigate back to the same node to continue.

"I was a little nervous, because at the beginning I clicked the wrong button." (Re: D-1-NAV-1-nervous)

However, she soon adjusted, and had no problem with the subsequent questions. Juliet was observed experiencing a mild case of looping after dropping a tier in the material, and almost retraced the same negative path twice. However, this may have been simply a case of wishing to explore the notion of consequence within the text. Nevertheless, Juliet did not elaborate on it during the post task interview.

Despite these few, and minor instances, no significant reports of disorientation anxiety were reported, giving credence to Landow's (1991) opinion that disorientation is potentially a pseudo problem, and simply the result of poor programming and technical design which can be mostly, if not entirely, eliminated with time and diligence. However, this statement may undersell the sheer amount of organization that goes into seamlessly hyperlinking 275 nodes to each other. It suggests that for hypertext navigation to be faultless, creation may still be too labour intensive to make it a practical alternative to paper textbooks.

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5.1.2 COGNITIVE OVERLOAD

There were nine reported instances, and two observed instances, of anxiety that could be attributed to the increased cognitive load of the material. These related to design or multimedia functions that caused confusion or anxiety outside of navigation.

In the first observed instance, Bravo experienced confusion with the embedded audio player. Despite all participants being informed of how to spot and activate the audio element, Bravo still avoided it on its first appearance, choosing to answer the question by guessing instead, and needed prompting to reinforce its use. This was an isolated incident, however, but possibly indicative of a lack of experience or exposure to the features of interactive pdf. Hotel was observed searching for answer options on one node in stage 3, as it was the first example where the answer options were contained in a subsequent node to the question node.

"Only this page I don't need to answer anything." - Hotel

However, as there was only one link to move forward, despite taking time, Hotel did not need prompting or assistance to continue. The answer pages in stage 3 proved unclear to Delta also:

"It's very unclear because there are so many questions."

(Re: D-3-MD-2-unclear)

Despite this, 4 participants agreed that it tested the grammar comprehension effectively.

The most common aspect, that was mentioned emphatically by three participants, was the decision of many phrases and instructions in the text to be presented entirely in uppercase letters. Juliet stated it as a cause of confusion in both stages 1 and 2, although only 'a little bit' in each case. Foxtrot and Hotel also both mentioned it as a source of anxiety:

"I do not like the upgrade words...difficult to read." (Re: F-1-MD-1-uncomfortable)

"I have a personal problem when I read the sentence because it's capital." (Re: H-2-MD-2-uncomfortable) This was an entirely avoidable design feature, originally included with the intention of improving clarity, but in actuality, causing more cognitive load for readers. It is a clear example of how easy it can be to inadvertently raise cognitive load through design.

Delta had an issue with the instruction page in stage 1:

"Not clear, I don't know the meaning."

(Re: D-1-MD-3-confusing)

Nevertheless, Delta seemed to follow the instructions without issue. Alpha expected a result for pressing the highlighted words in the text, and was frustrated by the lack of interaction:

"It seems like if I press it, it makes sound."

(Re: A-3-MD-2-frustrating)

In these instances, expectation management seems to play a part in cognitive overload. Landow (1997) states that creating hypertext has enormous potential beyond simply linking nodes together, and failing to implement these benefits can alienate the user. This implies that some students unfamiliar with digital texts may expect functions from hypertext that do not exist, with others may not expect to see, and possibly ignore, features that are there, and experience confusion as a result.

The most articulate and recognisable instance of cognitive overload came in Juliet's admission of tiredness by stage 4 in the material:

"My concentration went down a little bit..... this material includes listening, reading, and also... listening, reading and grammar, right? Also, some vocabulary... some words are new vocabulary for me. Also, while using this application, I have to sometimes confuse how to use this one..... Hypertext includes many functions, that's why I got a little bit tired." (Re: J-4-MD-1-tiring)

This seems to confirm the conclusion of Nowak (2008), and Shapiro and Niederhauser (2004) that there is an inherent increase in cognitive load when being asked to use multimedia functions in hypertexts, and subsequent anxiety, though nothing 'extreme' or unmanageable, as half the participants still reached the 'perfect' ending of the text.

5.1.3 DISSATISFACTION

Instances of negative feelings that could not be classified as 'disorientation' or 'cognitive overload' were also exhibited by some participants.

5.1.3.1 LANGUAGE

There were 11 reports of negative feedback regarding the relative ease or difficulty of the language within the text, and 70% of participants felt dissatisfied with the perceived ease of the grammar section in stage 2:

"I think the material is not very good... ... I need to compare the difference (w/ future simple)."

(Re: D-2-LANG-3-clear)

"Based on the answer, you can guess... you don't need to consider the grammar point."

(Re: E-2-LANG-3-easy)

Despite *dissatisfied* and *disappointing* being two popular adjectives volunteered in this section, few feelings of anxiety were expressed. Despite the overall opinion that the grammar section was the least popular section of the text, its ease was appreciated by Bravo and Alpha, the latter of whom saw the advantage:

"...on the other hand, it can help learners feel confident" (Re: A-2-LANG-2-dissatisfied)

Foxtrot even linked it to her increased score in the level check:

"This part is easy for me... ...this is why I changed my answer on the level check"

(Re: F-2-MD-3-clear)

The few instances of expressions relating to anxiety came with the language in stage 1, which may well be expected, as readers were still becoming accustomed to the style and functions, possibly resulting from having little previous experience with digital text. Both Golf and Juliet expressed a desire for greater help with the vocabulary, either by having an audio pronunciation guide, or more examples:

"I wanted another example..."

(Re: J-1-LANG-1-confusing)

Both Bravo and Foxtrot also expressed apprehension of the vocabulary in stage 1, as they believed it might be more of a high stakes test than a practice exercise:

"I'm really afraid if I make some mistakes because I thought that maybe it's a way to test if I know the words."

(Re: B-5-LANG-1-afraid)

"I feel a little bit anxiety..."

(Re: F-1-LANG-1-anxious)

It can be argued that the unknown nature of the material is responsible for these few instances of anxiety. In paper text books, students are often not anxious even if tests are included. If a teacher is present to judge, however, there is often a sense of anxiety and urgency to succeed. It is possible that because the material can act as a teacher by analysing the reader's actions, and judging accordingly, it elicits similar anxiety. It is also important to consider that these feelings of judgement may well be the result, if only in part, of the observation by the administrator.

5.1.3.2 MATERIAL DESIGN

The seven instances regarding material design that did not result in cognitive overload, instead elicited feelings of mainly boredom and disappointment, over a range of features. These included a lack of audio script, the inability to highlight or take notes, and the occasional pedestrian nature of the story and style of questions.

"It's a little boring, always answering similar questions." (Re: D-3-MD-1-boring)

"I always want to highlight something, but I couldn't." (Re: F-3-MD-1-disappointing)

It seems that despite this study being many participants first time learning English through hypertext, they quickly came to realise the potential possibilities of the medium, and gained higher expectations than they would of a paper text. This feedback is useful for possible consideration in future hypertext design, and entirely justified, as autonomous learners should hold any potential challenger to traditional paper texts up to higher standards, ones that would justify the extra cognitive effort required to use it.

5.1.3.3 OTHER AFFECTIVE FACTORS

Finally, there were two instances of disappointment with the limitations of the Electronic Dictionary:

"The electronic dictionary need to include the sound." (Re: A-4-ED-1-disappointing)

"This is some vocabulary you assume people don't know, but actually I have some other vocabularies I don't know."

(Re: K-1-ED-1-disappointing)

There was also some mild anxiety felt by Bravo, who, despite being told there was no time limit for the exercise, felt pressure anyway which she claimed was due to her past experiences with IELTS teachers and their time limits:

"Every time when I read something, I feel nervous."

(Re: B-1-PAC-2-nervous)

Overall, the instances of learner anxiety were few, with no instances being rated as 'extreme' by participants. The instances that did arise were articulated clearly, and could be countered with more diligent programming. There were no instances that suggested disorientation or cognitive load were either insurmountable hurdles that are inherent to hypermedia, or factors that could not be rectified with better programming.

5.2 SLA EFFICACY

If *Business Hero* failed to be a useful textbook for language acquisition, it would render any other results of the study meaningless. Therefore, the subsequent results are examined to confirm that it functions adequately as an SLA tool, to answer RQ2. The text had seven KLP that needed to be able to be learned and retained autonomously by a reader with a meaningful success rate. These were the six vocabulary items *purpose*, *visa*, *claim*, *carousel*, *declare*, and *inspect*, and future progressive grammar. It also needed to be appealing, engaging, and user friendly enough to challenge the preference of its paper book counterparts, otherwise its potential for being a valid alternative for study would also be made meaningless. In essence, like any good language lesson, it needed to balance being pedagogically effective while also enjoyable enough that students would return for more.

5.2.1 LEVEL CHECK RESULTS

The pre-task and post task level checks contained all seven KLP, along with nine ancillary language items (See Appendix 1). Table 3 presents the comparison of both scores out of a possible 16. In all but one participant's case, there was an increase in understanding after using *Business Hero*. The mean pre-task score was 11.1 (SD=1.9), and the mean post-task score was 13.2 (SD=1.3), showing a mean increase of 19%.

	PRE-TASK SCORE (Out of 16)	POST TASK SCORE (out of 16)	INCREASE
Alpha	11	14	3
Bravo	10	11	1
Charlie	7	11	4
Delta	9	13	4
Echo	12	12	0
Foxtrot	12	14	2
Golf	11	14	3
Hotel	14	15	1
Juliet	13	14	1
Kilo	12	14	2
MEAN	11.1	13.2	2.1

Table 3: Total level check scores

For reliability of results, the language items on both level checks were identical. However, in the case of the post task level check, it was entirely possible for participants to try and second guess some of the ancillary language items that they may have been unsure about in the pre-task level check (even if their answers had been correct). Therefore, to eliminate this variable, Table 4 shows the scores of only the target seven KLP (the language that *Business Hero* contained and was designed to teach) from both level checks. The mean pre-task score was 3.5 (SD=0.9), and the mean post-task score was 5.4 (SD=1.1), showing a mean increase of 54% in the comprehension of the language *Business Hero* was designed to teach.

	PRE-TASK SCORE (Out of 7)			POST TASK SCC	INCREASE		
	VOCABULARY	GRAMMAR	TOTAL	VOCABULARY	GRAMMAR	TOTAL	INCREASE
Alpha	3	0	3	4	1	5	2
Bravo	3	0	3	4	0	4	1
Charlie	2	0	2	3	0	3	1
Delta	2	0	2	6	0	6	4
Echo	4	0	4	4	1	5	1
Foxtrot	4	0	4	6	1	7	3
Golf	3	1	4	5	1	6	2
Hotel	5	0	5	6	0	6	1
Juliet	3	1	4	5	1	6	2
Kilo	4	0	4	5	1	6	2
MEAN			3.5			5.4	1.9

Table 4: KLP level check items

From this table, it is clear that the material created a positive improvement in the understanding of the KLP in all students. The most dramatic improvement was Delta, who improved by 200%. Four students developed a better understanding of the grammar point, and at least one student used the material to increase their understanding to correctly answer all seven KLP questions. These results suggest that *Business Hero* can be effective in learning new grammar and vocabulary when used autonomously.

5.2.2 EVIDENCE OF EFFICACY

To further assess and confirm the effectiveness of the material, the 38 positive instances of participants voluntary feedback given during the stimulated recall and post task interview were also analysed and interpreted. A complete table of instances from this section can be found in Appendix 6. Participants ranked the degree of their feelings (using the fixed scale on the prompt sheet - Appendix 3), and they were assigned a numerical value 1-4 to allow for a cumulative score:

A little	= 1
Moderately	=2
Very	= 3
Extremely	=4

Instances were coded by participant, stage, degree of feeling and adjective. For example: *C-3-NAV-4-motivated* represents C=*Charlie participant*, 3=*Stage 3*, NAV=*Navigation*, 4=*Extremely*, motivated=*adjective used to describe feeling*. Total positive instances and scores are shown in Table 5.

INSTANCES OF POSITIVE FEEDBACK							
Access of motorial	Code Instances	Score				Total	
Aspect of material	Code	instances	1	2	3	4	score
STORY	ST	12	0	1	8	3	38
MATERIAL DESIGN	MD	12	0	4	7	1	33
LANGUAGE	LANG	5	0	0	4	1	16
ELECTRONIC DICTIONARY	ED	4	0	0	3	1	13
NAVIGATION	NAV	4	0	1	1	2	13
FEEDBACK	FDK	1	0	0	1	0	3

Table 5: Instances of positive feedback

In the following section, these instances will be discussed to discover what the most effective aspects of the hypertext material were from the participants' perspective.

5.2.2.1 STORY

The story was cited 12 times, and was the aspect that participants were seemingly most emphatic about.

"I really enjoyed the material and the story."

(Re: B-1-ST-3-enjoyed)

Specifically, the multiple endings of the branching narrative proved to be the most popular feature, prompting participants to want to try again if possible.

"It's quite interesting... ... I want to try it again... ... The more you try, the more you learn!"

(Re: F-5-ST-4-good)

"I want to try again... ... it motivates my curiosity."

(Re: G-5-ST-4-motivated)

"Maybe I'll try to get perfect score"

(Re: J-5-ST-3-comfortable)

It could be argued that an important element of ESL texts is the ease with which it can be reviewed, reread and act as a continuously useful resource. Landow (1997) supports this by acknowledging that hypermedia that allows or motivates readers to replay all or part of the text can make them more active learners. This may be especially important for autonomous learners who may be the only ones responsible for their own motivation. Classroom language lessons tend to only be repeated as a remedial measure for a poor performance. *Business Hero*, on the other hand, encourages replay by piquing curiosity. To reach a different end of the story, a reader would have to start again from the beginning. Because the first 50% of the rungs would be identical, in a behaviourist sense, this would drill the vocabulary and grammar again, and then reward the reader with a different story to prevent boredom. From a socio-cultural perspective, the reader would be familiar with the path they first chose, and may be ready to explore other avenues, perhaps where the language is different and more challenging. In this way, the text can assist readers and implement the theory of the ZPD with each successive read.

The authentic nature of the story was also cited as a reason the material might prove effective in language learning:

"If you do practice in authentic context, you think 'oh, I have the experience in this authentic context', so it's familiar to me." (Re: C-5-ST-3-comfortable) *"It's just like you experience...* (in a real airport)" (Re: D-1-ST-3-useful)

"I think it's an authentic environment"

(Re: D-4-ST-2-satisfying)

Although paper text books also often contain authentic elements, both Charlie and Delta comment on the 'context' or 'environment', perhaps implying that, as the reader maintains the role play throughout the entire text without essentially 'breaking the fourth wall', it creates an even more authentic, immersive experience.

5.2.2.2 MATERIAL DESIGN

There were 12 voluntary instances of positive feedback regarding the design, layout and multi-media aspects of the material. In most cases, the participants commented on the aesthetic of the material and the clarity of the layout.

"I like the description about the officer, the pictures..."

(Re: F-3-MD-2-satisfying)

However, three participants again drew attention to the authentic nature of these elements, specifically the audio elements.

"The audio is good because you can feel it's authentic like the atmosphere at the airport."

(Re: E-3-MD-2-satisfying)

"It's authentic, I think."

(Re: F-4-MD-2-authentic)

"It's also good because the audience students can practice listening." (Re: G-4-MD-3-authentic)

This lends credence to the idea that hypertext fiction can perhaps create a greater degree of authenticity than paper texts could achieve, or that students who favour paper texts would expect. The ability of the digital book to fully integrate audio with no interruption of switching the reader to a supplemental audio player again avoids the need to break the immersive experience.

5.2.2.3 LANGUAGE

The other elements of the text received significantly fewer mentions, with five instances of the language being mentioned favourably throughout the text. Four of those five instances were with regard to how the vocabulary and grammar were presented and practiced in stages 2 and 3. The most emphatic of these was Bravo, who extremely enjoyed the way the grammar was administered, despite her admission that:

"I'm bad at grammar and I hate grammar."

(Re: B-2-LANG-4-enjoyable)

Many students commented on their distaste for learning grammar, often citing their high school experiences as a cause. It came as a relief to many that the grammar section was short, interactive, and came without any kind of 'punishment' for making mistakes.

5.2.2.4 OTHER EFFECTIVE ELEMENTS

Golf, Juliet and Kilo all commented on the effectiveness of the electronic dictionary feature, with three of their four comments referring to stages 1 and 2, when acclimatising to the material and becoming aware of what scaffolding exists within it was most important.

"The electronic dictionary was very useful"

(Re: G-1-ED-4-useful)

"The electronic dictionary was really helpful"

(Re: K-1-ED-3-useful)

Golf particularly liked the picture element on some pages of the Electronic Dictionary, which a few participants mentioned was significantly more helpful than its dictionary definition.

"The picture can help me understand the words."

(Re: G-4-ED-3-useful)

There were also four instances of the Navigation being mentioned positively, although participants seemingly had a harder time articulating exactly why they found it motivating.

"Navigation I think is motivate me to study." (Re: C-3-NAV-3-motivating) The immediate feedback during the practice phase was only mentioned once:

"... feedback is good."

(Re: F-2-FDK-3-motivating)

This was surprising, as these were all elements that arguably could only exist in their current form in a digital text, and were purposefully included to showcase just how superior hypertext could be from its paper counterpart, and yet most participants did not find their inclusion surprising, and in many cases, gave details on how they did not live up to their expectations. This may indicate that the weight of expectation users now have for technology has increased to a point that were it to try to replace paper text as a preferred medium, it would need to be exceptional, not merely adequate. On the other hand, it may validate the integration of these elements, as they were designed to help while being subtle and innocuous, making them go unnoticed. Ritchey et al. (2012) state that appropriate scaffolding is a necessity to meet the demands of language learners, however, this study argues that scaffolding need not be obvious or transparent to the learner to be effective.

5.3 PREFERENCE OF MATERIAL

The preferences of participants towards paper or digital text were ascertained before the study in the pre-task interview (See Table 1: Participant information). These preferences were ascertained again in the post task interview, to see if their experience using *Business Hero* had altered their perceptions, and to answer RQ3.

Of the 10 participants who used the text, 50% used it autonomously to reach the green 'perfect' ending of the text. This meant that the text taught them the vocabulary and grammar they needed to complete each stage, and they made no mistakes at any point from Stages 3-5. Forty percent reached the amber 'adequate' ending, meaning they made only a single mistake through Stages 3-5. Only one participant reached the red 'poor' ending, the same participant who claimed the material was only 'a little' effective as a language learning tool. Overall, 60% of participants claimed to be very satisfied with their experience using hypertext, and 40% were moderately satisfied. As a language learning tool, 10% claimed it extremely effective, 60% very effective, 20% moderately effective and 10% a little effective. Sixty percent of participants claimed they were inspired to replay the material to seek out alternative paths and story endings.

Sixty percent of participants said the experience improved their feelings towards hypertext, changing their clear preference of paper books to being 50/50 in favour of digital. Twenty percent of participants changed their mind to having a clear preference of the digital book. The other 20% already had a preference to digital books, and kept their preference. This implies that the majority of participants, like Hotel, enjoyed their experience and found it beneficial to their studies:

"Very satisfying, because actually I learn in this short time..... I learned the grammar and the vocabulary. It's very helpful for me." – Hotel

When discussing the overall advantages and disadvantages of hypertext over paper texts, 0% of students voluntarily mentioned issues of anxiety, disorientation or cognitive load as disadvantages of hypertext. Commonalities included 30% of participants claiming that the inability to take notes, or write on the text, was a clear disadvantage, 30% saying the hypertext was simply too easy, and 10% expressing trepidation of not knowing what to expect:

"Before I start using it, I have no idea about what is going on." - Foxtrot

Fifty percent mentioned the main advantage was the roleplay aspect:

"The feeling like I'm not learning on purpose, just playing, is relaxing." - Foxtrot

"It's a kind of game. It's fun." - Hotel

Thirty percent cited the interactive elements as the main advantage of hypertext, and 20% thought the main advantage was the authentic nature of the text.

"It's really similar as my true experience." - Foxtrot

Twenty percent also praised the navigation, with Alpha specifically mentioning the navigation's rung system progress bar as being useful.

"I can have some hope. It's almost to finish!" – Alpha

This suggests that there are advantages to hypertext fiction as a learning tool, but also affective factors (e.g. the inability to annotate and make notes), that prevent it from becoming a clear preference over paper text. However, these affective factors do not seem to include anxiety of orientation and cognitive overload to any significantly large degree.

CHAPTER 6: CONCLUSION

This study intended to investigate if using hypertext for SLA contained inherent anxiety for students, or if by design, this anxiety could be alleviated or eliminated. To explore this issue, the study posed three research questions:

- RQ1: Do East Asian postgraduate university students experience anxiety when using hypertext as a self-study language learning material?
- RQ1a: What type of anxiety do the students experience when using *Business Hero*?
- RQ1b: What degree of anxiety do the students experience when using *Business Hero*?

The study also explored the efficacy of hypertext as an autonomous SLA tool:

RQ2: How effective is *Business Hero* for the acquisition of English lexis and syntax for these students?

Finally, using the results of these questions, the study sought to investigate the preferences of its participants toward paper or hypertext material when used for self-study language learning:

RQ3: What is the students preferred media for self-study reading?

In an attempt to answer these questions, 10 East Asian students used a modern and original hypertext fiction with the aim of learning six key vocabulary items and one grammar point. They were given pre-task and post task level checks and interviews to gauge their comprehension of the language and their feelings throughout the reading respectively. Results were triangulated, transcribed, tabulated, and coded before being analysed and discussed. This chapter will present a summary of the findings of the study, discuss their impact, implications, and limitations, and what they mean for the future of hypertext for SLA.

6.1 SUMMARY OF KEY FINDINGS

Regarding RQ1,1a, and 1b, although there was considerable feedback detailing the participants dissatisfaction with the material, there were few instances of significant anxiety encountered in the text. Participants did not get lost in hyperspace, more often finding their route through the text to be pedestrian. There were some identifiable instances of the increased cognitive demands of the material, but none

that resulted in dismissal of the material, or a lack of improvement in the comprehension of the key vocabulary and grammar. The type of anxiety most often cited by participants arose from the limitations of the material design, and to what degree it helped them with the language within the text. Despite only half the participants having experience with digital texts before, almost all of them either expected features to be there that were too labour intensive to include (e.g. having an audio function for every word in the glossary), or bypassed features that were designed to help (the electronic dictionary). Despite many participants volunteering the opinion that eye-strain must be the reason digital text books are not as preferred as paper books in language studies, no participant mentioned an occurrence of eyestrain throughout their reading. However, the presentation of many words and sentences in capital letters was the source of discomfort to many. Nevertheless, there were no cases of 'extreme' anxiety or confusion. While this cannot prove that the illusionary techniques that Business Hero employed to combat anxiety worked, it does suggest that they were either effective, or that disorientation and cognitive overload are now non-issues in modern hypertext.

Regarding the efficacy of *Business Hero* in relation to RQ2, the study showed that 100% of participant's comprehension of the key vocabulary items increased, and four participants gained better comprehension of the key grammar than they had before. This does not take into account any additional language learned through the reading or the electronic dictionary function, or the added benefits the reading and listening exercises provided for comprehension. This suggests that hypertext can be used as an effective and autonomous language learning tool, and in the case of *Business Hero*, that an immersive role-playing story, presented in an authentic domain, can be an effective and engaging way to present new language.

RQ3 proved harder to conclusively answer. On one hand, over half of the participants had an improved opinion of digital materials after using *Business Hero* than before they took part. However, the fact that the majority of participants expressed some kind of dissatisfaction resulting from the perceived limitations of an array of features, suggests that expectations of digital material are still diverse, and in many cases, somewhat arbitrary. However, the majority of participants seemed to concur that until hypertext is as easy to annotate as paper text, paper texts will always be relevant and the preferred choice for some as a self-study material.

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6.2 IMPLICATIONS AND IMPACT

The lack of any substantial navigational anxiety within the study would seem to imply that either technical design and user familiarity have increased and improved to the point where becoming 'lost in hyperspace' is simply a non-issue with competent design, or that the design of *Business Hero* was not complex enough to adequately allow for it to be measured. The ubiquity of text now being read on portable devices such as tablets and smart phones has potentially made many navigational features easily recognisable to most students below a certain age. The material meets the criteria of a hypertext fiction however, in that it is a multi-branching narrative, that can also be backward navigated, with multiple choices in its paths and endings. Taking into account it also incorporates illusionary elements to its navigation, it can be argued that it is essentially *more* complex than regular hypertext fiction, and that it was designed to simply appear less complex. The study implies that through diligent design, navigational issues and anxiety from increased cognitive load need not exist inherently in hypertext, and that the approach to the material design is responsible for either mitigating or exacerbating its occurrence. The impact of this may be a compromise on the programmer's part, as to whether the increased labour required to meet these design requirements, and the expectations of hypertext users, is indeed worth the effort. Paper text may still be the more practical, cost effective measure.

If it is possible for no significant anxiety to occur when using hypertext, then what is the perceived disadvantage that prevents it from being a preference to paper texts? That over half the participants were inspired to replay the text, and had improved their opinion of digital material by the end of the study, seems to imply that hypertext material is not used to study language due the fact that little familiarity of it exists for students. As technology changes and evolves so rapidly, there has possibly been little chance for any kind of standardization or saturation of the format. The impact of this would be that readers have no idea what to expect, making paper texts the safer choice. In which case, it is for language teachers and developers to better demonstrate and facilitate the use of these materials, and to give them more exposure in and outside of the classroom.

6.3 LIMITATIONS

This study was able to draw on conclusions from commonalities experienced by 10 participants, but is also limited in scope by this number. The study invited students from a range of East Asian countries, however 90% of the students who took part were Chinese, and therefore the results are heavily reflective of Chinese culture and preference. More insights from other cultures would help refine the design of hypertext material were it necessary to create broader appeal and make more generalised conclusions about its efficacy.

Throughout the post task interview, participants were aided in their efforts to articulate their feelings about the material in English, but would undoubtedly have been able to provide more nuanced and descriptive feedback had the post-task interview been conducted in their first language. As Fehr and Russell (1984 p.464) state, 'Everyone knows what an emotion is, until asked to give a definition.' The concepts of language anxiety and cognition would most likely be peripheral to many native English speakers, meaning second language speakers would have to be able to formulate both an awareness and recognition of the problem, as well as find appropriate language with which to articulate it, potentially limiting the precision of the feedback.

Stimulated recall may have allowed for key experiences and feelings to have been missed or forgotten by participants, despite the immediacy of the post task interview. Think aloud protocols, while immediate, were deemed too intrusive to the fluency of reading and immersive nature of text, but may have revealed information that participants either forgot, or were too involved or distracted to mentally note.

To gauge commonalities of anxiety and efficacy, a diverse range of hypertext materials could be used to gather a bigger, more accurate and more reliable representation of factors. In terms of positionality, third party hypertext materials would introduce less bias into the study, despite participants not being told *Business Hero* was the researcher's creation. Both nationality and age are significant factors that need more broader exploration, as cultural identity not only informs material design preferences, but also those of story, role-playing etc. and age could be an important aspect when considering the amount of anxiety experienced by either digital natives or digital immigrants (Prensky, 2001).

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6.4 THE FUTURE OF HYPERTEXT IN TESOL

This study has shown that there are advantages of digital hypertext that paper text cannot match, that go beyond simply being a novelty. It can be more immersive, engaging, fun, and can integrate listening practice. However, despite offering electronic annotation tools, it is unlikely to ever match a paper text's ability to be quickly opened and doctored. By the time digital platforms and software have caught up to being just as familiar as paper textbooks as a language learning option, advances in technology will most likely have overshadowed the potential for hypertext fiction to become a common learning tool.

Translation technology is improving to the point where it may challenge the necessity to learn a second language at all, and voice recognition technology, while currently not flawless, is advanced enough to make speech interaction a necessary part of the digital learning landscape. The *Amazon Echo* and other electronic personal assistants already have the ability to translate, teach, and interact with students, creating a whole new level of potential self-study for language learners. While most digital interfaces can present the receptive skills of reading and listening well, but arguably struggle to offer true meaningful feedback for productive skills, they may not overtake paper texts in terms of usefulness, and remain a novelty. It may not be until all four skills are integrated seamlessly onto one platform, that can analyse and give feedback to grammar, intent, fluency, inflection and the nuance of speaking and writing, that paper texts finally become an obsolete means of study. However, with new technology there will no doubt come new anxiety. When used for language learning, programmers will always need to take this into account, and, as in *Business Hero*, consider and design appropriate countermeasures:

"When dealing with the affective side of language learners, attention needs to be given both to how we can overcome problems created by negative emotions and to how we can create and use more positive, facilitative emotions" (Arnold and Brown, 1999 p.2)

If voice recognition is to be the next step forward, then the next hypertext fiction for SLA might well be entirely spoken. However, as Kasper (2000) states, whatever path the future of computer based learning takes, it is assured that learners will have to take on more responsibility for their own learning. Therefore, looking for new ways to make self-directed study appealing and user friendly for students is essential.

REFERENCE LIST

- Altun, A. (2003). Understanding hypertext in the context of reading on the web: Language learners' experience. *Current Issues in Education.* vol.6, no.12. Mary Lou Fulton College of Education, Arizona State University.
- Anderson-Inman, L., Horney, M., Der-Thanq, C., and Larry, L. (1994). Hypertext literacy: Observations from the Electro Text Project. *Language Arts* no.71, pp.279-289.
- Arnold, J. and Brown, D. H. (1999). A map of the terrain. Arnold, J. (ed.) Affect in Language Learning pp.1-24. Cambridge: University Press.
- Bamberg, M. (2010). Who am I? Narration and its contribution to self and identity. *Theory & Psychology*, vol.21, pp.1–22.
- Bandura, A. (1994). Self-efficacy. In Ramachaudran, V. S. (ed.), *Encyclopedia of Human Behavior.* vol.4, pp.71-81 New York: Academic Press.
- Bazinet, N. (2015). Towards narrative-centred digital texts for advanced second language learners. *Cahiers De L'llob*, vol.7, pp.85–95. Université De Sherbrooke
- Beeman, W. O., Anderson, K. T., Bader, G., Larkin, J., McClard, A. P., McQuikian, P., and Shields, M. (1987). Hypertext and pluralism: from lineal to non-lineal thinking. *Proceedings of Hypertext '87*, pp.67-88. University of North Carolina, Chapel Hill.
- Biber, D., Johansson, S., Leech, G., Conrad, S. and Finegan, E. (1999). *Longman Grammar of Spoken and Written English*. Harlow: Pearson Education.
- Brockmeier, J., and Carbaugh, D. (2001). *Narrative and identity: Studies in autobiography, self and culture.* Amsterdam: John Benjamins.
- Brown, P. (1989). Do we need maps to navigate around hyperspace? *Electronic Publishing origination, dissemination and design*, vol.2, no.2, pp.91-100.
- Bush, V (1945). As We May Think. Atlantic Monthly, vol.7, pp.101-108.
- Chandler, P., and Sweller, J. (1991). Cognitive load theory and the format of instruction. *Cognition and Instruction*, vol.8, pp.293–332.
- Chesler, M., and Fox, R. (1966). *Role-playing methods in the classroom.* Chicago: Science Research Associates.
- Clark, R., Nguyen, F., and Sweller, J. (2006) *Efficiency in learning: Evidence-based guidelines to manage cognitive load*. San Francisco, CA: Pfeiffer.
- Dalgarno, B. (2001). Interpretations of constructivism and consequences for computer assisted learning. *British Journal of Educational Technology*, vol.32, no.2, pp.193-194.

- Davies, A., Brown, A., Elder, C., Hill, K., Lumley, T., and McNamara, T. (1999). Studies in Language Testing 7: Dictionary of Language Testing. Cambridge: Cambridge University Press.
- Dawson, J. (2012) Thick Description. Mills, A. J., Durepos, G. and Wiebe, E. (eds.) *Encyclopedia of Case Study Research*, pp.943-944. Thousand Oaks: SAGE Publications, Inc.
- Denzin, N. K. (1978). *The Research Act: A theoretical introduction to sociological methods*. New York: Praeger.
- English Profile. Available: <u>http://www.englishprofile.org/</u> [Accessed April 2018]
- Ensslin, A. (2006). Literary hypertext in the foreign language classroom. A case study report. *Language Learning Journal*, vol.33, pp.13–21. New York: Routledge.
- Fehr, B. and Russel, J. A. (1984). Concept of emotion viewed from a prototype perspective. *Journal of Experimental Psychology: General*, vol.113, pp.464-486.
- Foss, C. L. (1989). *Detecting lost users: Empirical studies on browsing hypertext.* Sophia-Antipolis, France: INRIA.
- Godwin-Jones, R. (2011). Emerging Technologies: Autonomous Language Learning. *Language learning and Technology,* vol.15, no.3, pp.4-11.
- Gorden, S., Gustavel, J., Moore, J., and Hankey, J. (1988). The effects of hypertext on reader knowledge representation. *Proceedings of the Human Factors Society 32nd Annual Meeting*, pp.296-300.
- Gould, J. D., Alfaro, L., Finn, R., Haupt, B. and Minuto, A. (1987). Reading from CRT displays can be as fast as reading from paper. *Human Factors,* vol.26, no.5, pp.497-517.
- Gray, S. H. (1990). Using protocol analysis and drawing to study mental model construction during hypertext navigation. *International Journal of Human–Computer Interaction*, vol.2, no.4, pp.359-377.
- Harmer, J. (2015). *The Practice of English Language Teaching 5th Edition.* Edinburgh: Pearson Education Limited.
- Hattie, J. (2011). Visible Learning for Teachers: Maximizing Impact on Learning. New York: Routledge.
- Hattie, J. and Yates, G. (2013). Visible Learning and the Science of How We Learn. New York: Routledge.
- Heaton, J. B. (1975). *Writing English Language Tests*. London and New York: Longman.
- Heron, J. (1989). The Facilitator's Handbook. London: Kogan Page.

- Hofman, R., and Van Oostendorp, H. (1999). Cognitive Effects of a Structural Overview in a Hypertext. *British Journal of Educational Technology*, vol.30, no.2, pp.129–140.
- Horwitz, E. (2001). Language Anxiety and Achievement. *Annual Review of Applied Linguistics,* vol.21, pp.112-126. Cambridge: Cambridge University Press
- IELTS.org. Available: https://www.ielts.org/-/media/pdfs/comparing-ielts-andcefr.ashx?la=en [Accessed April 2018]
- Johnson, R. K. (1989). *The Second Language Curriculum*. Cambridge: Cambridge University Press.
- Kasper, L. F. (2000). *Content-Based College ESL Instruction*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Kasper, L. F. (2003). Interactive Hypertext and the Development of ESL Students: Reading Skills. *The Reading Matrix,* vol.3, no.3.
- Kenning, M. M. and Kenning, M. J. (1990). *Computers and Language Learning: current theory and practice.* Chichester: Ellis Horwood Ltd.
- Krashen, S. (1982). *Principles and practice in second language acquisition.* New York: Pergamon Press.
- Labov, W. (2010). Narratives of personal experience. In Hogan, P. C. (ed.) *Cambridge Encyclopedia of the Language Sciences*. Cambridge: Cambridge Univesity Press.
- Ladousse, G. P. (1987). Role play. New York: Oxford University Press.
- Landow, G.P. (1990). *Hypertext: The Convergence of Contemporary Critical Theory and Technology*. Baltimore: John Hopkins University Press.
- Landow, G. P. (1991). The status of the navigation problem. In Furuta, R. and Stotts,
 D. D. (eds.) *Proceedings of the Third ACM Conference on Hypertext*, pp.364.
 New York: ACM Press.
- Landow, G. P. (1997). *Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology.* Baltimore and London: The John Hopkins University Press.
- Lave, J., and Wenger, E. (1991) Situated learning: Legitimate peripheral participation. New York: Cambridge University Press.
- LeCompte, M. D., and Goetz, J. P. (1982). Problems of Reliability and Validity in Ethnographic Research. *Review of Educational Research,* Spring 1982, vol.52, no.1, pp.31-60.

- Levy, M. and Stockwell, G. (2006). *CALL Dimensions.* Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- McKnIght, C., Dillon, A., and Richardson, J. (1990). A comparison of linear and hypertext formats in information retrieval. In McAleese, R., and Green, C. (eds.) *Hypertext: The state of the art.* pp.10-19. Oxford: Intellect Books
- McKnIght, C., Dillon, A., and Richardson, J. (1991). *Hypertext in Context.* Cambridge: Cambridge University Press.
- Merseth, K. K. (1996). Cases and case methods in teacher education. In Sikula, J. (ed.) *Handbook of research on teacher education (2nd edition.),* pp.722-741. New York: Macmillan and the Association of Teacher Educators.
- Miall, D. S., and Dobson, T. (2001). Reading hypertext and the experience of literature. *Journal of Digital Information*, vol.2.
- Miles, A. (2006). Hypertext Structure as the Event of Connection. *Journal of Digital Information.* vol.2, no.3, February.
- Müller-Kalthoff, T., and Möller, J. (2006). Browsing while reading: Effects of instructional design and learners' prior knowledge. ALT-J Research in Learning Technology, vol.14, no.2, pp.183–198.
- Murray, J. (1997). *Hamlet on the Holodeck: The future of narrative in cyperspace.* New York Free Press.
- Nelson, T. H. (1987). *Computer Lib/Dream Machines* Seattle, Wash.: Microsoft Press.
- Neville, D. O., Shelton, B. and McInnis, B. (2009). Cybertext redux: Using digital game-based learning to teach L2 vocabulary, reading and culture. *Computer Assisted Language Learning*, vol.22, pp.409–424. New York: Routledge.
- Neville, D.O. (2010) "Structuring narrative in 3D digital game-based learning environments to support second language acquisition." *Foreign Language Annals.* vol.43, pp.446–449.
- Nowak, L. (2008). Digital reading theory and its relationship to academic reading practices. *Design of Electronic Text.* vol.1, no.1, pp.1–7.
- O'Brien, J. (1993) "Action research through stimulated recall" *Research in Science Education*, vol.23, pp.214-221.
- Paulston, C. B., Britton, D., Brunetti, B., and Hoover, J. (1975). Developing communicative competence: Roleplays in English as a second language. Pittsburgh, PA: University Center for International Studies.
- Pike, K. L. (1964). *Language in relation to a unified theory of structures of human behavior.* The Hague: Mouton.

- Prensky, M. (2001). Digital Natives, Digital Immigrants. *On the Horizon,* vol.9, Oct 2001. MCB University Press.
- Ritchey, K. D., Silverman, R. D., Montanaro, E. A., and Schatschneider, C. (2012). Effects of a tier 2 supplemental reading intervention for at-risk fourth-grade students. *Exceptional Children*, vol.78, no.3, pp.318–334.
- Robinson. P. (1991). *ESP Today: A Practitioner's Guide.* Hemel Hempstead: Prentice Hall International.
- Rouet, J. F. (1990). Interactive text processing by inexperienced (hyper-)readers. In Rizk, A., Streitz, N., and Andre, J. (eds.) *Hypertexts: Concepts, systems and applications,* pp.250-260. Cambridge: Cambridge University Press.
- Rouet, J. F., Levonen, J. J., Dillon, A., and Spiro, R. J. (1996). An introduction to hypertext and cognition. In Rouet, J. F., Levonen, J. J., Dillon, A., and Spiro, R. J. (eds.) *Hypertext and Cognition*, pp.3-8. Mahwah, NJ: Lawrence Erlbaum Associates.
- Rouet, J. F. and Levonen, J. J., (1996). Studying and Learning with Hypertext: Empirical Studies and Their Implications. In Rouet, J. F., Levonen, J. J., Dillon, A. and Spiro, R. J. (eds.) *Hypertext and Cognition*, pp.9-24. Mahwah, NJ: Lawrence Erlbaum Associates.
- Scarcella, R. C. (1978). Socio-drama for social interaction. *TESOL Quarterly*, vol. 12, pp.41-46.
- Seedhouse, P. (1995). Communicative CALL: focus on the interaction produced by CALL software. *ReCALL*, vol.7, no.2, Nov pp.20-28.
- Segalowitz, N. (1976). Communicative incompetence and the non-fluent bilingual. *Canadian Journal of Behavioural Science*, vol.8, pp.121–131.
- Shapiro, A., and Niederhauser, D. (2004) "Learning from hypertext: Research issues and findings" in Jonassen, D.H. (ed.), *Handbook of research on educational communications and technology,* p.605–620. Mahwah, NJ: Lawrence Erlbaum Associates.
- Skinner, B. F. (1974). About Behaviorism. New York: Random House USA Inc.
- Spielberger, C. D. (1983). *Manual for the state-trait anxiety inventory.* Palo Alto, CA: Consulting Psychologists Press.
- Sweller, J. (1990). Cognitive processes and instructional procedures. *Australian Journal of Education*, vol.34, no.2, pp.125-130.
- Thang S. M., Lin, L. K., Mahmud, N., Ismail, K. and Zabidi, N. A. (2014). Technology integration in the form of digital storytelling: mapping the concerns of four Malaysian ESL instructors. *Computer Assisted Language Learning*, vol.27, no.4, pp.311-329.

- Thomson, C. K. (1996). Self-assessment in self-directed learning: issues of learner diversity. In Pemberton, R., Li, E. S. L., Or, W. W. F., and Pierson, H. D. (eds.) *Taking Control: Autonomy in Language Learning*, no.6. Hong Kong: University Press.
- Van Ments, M. (1999). The Effective Use of Role-play. London: Kogan Page Ltd.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.
- Warschauer, M. (1996). Computer Assisted Language Learning: an Introduction. In Fotos, S. (ed.) *Multimedia language teaching,* pp.3-20. Tokyo: Logos International.
- Warschauer, M. (2005). Sociocultural Perspectives on CALL. In Egbert, J. L. and Petrie, G. M. (eds.) *CALL Research Perspectives,* pp.41-52. Mahwah, NJ: Lawrence Erlbaum Associates.
- Watson-Gegeo, K. A. (1988). Ethnography in ESL: Defining the Essentials. *TESOL Quarterly*, 1988, vol.22, no.4, pp.575-592.
- Zuengler, J. and Miller, R. (2006). Cognitive and Sociocultural Perspectives: Two Parallel SLA Worlds? *TESOL Quarterly*, vol.40, no.1, pp.35-58.

BUSINESS HERO

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APPENDICES

APPENDIX 1: PRE-TASK AND POST TASK LEVEL CHECK

NAME:	PRE TASK SCORE:
DATE & TIME:	POST TASK SCORE:
PART 1: GRAMMAR	PART 2: VOCABULARY
 How many people are there? There is two people There are two people It is two people They are two people 	 9. The word hero is closest in meaning to: a co-worker a champion a student a sports person
2. Who is taller, Mike or Jim? Jim is more taller than Mike Jim is more tall than Mike Jim is taller than Mike Jim is taller as Mike	 10. The word boss is closest in meaning to: a supervisor a hero a peer a subordinate
 3. How long does it take to the train station? It take five minutes It takes five minutes It take five miles It takes five kilometres 	11. The word inspect is closest in meaning to: a bug a detective consider investigate
 4. When do you need the report? I need it by Monday I need it until Monday I need it since Monday I need it to Monday 	 12. The word purpose is closest in meaning to: alarm promise reason investigate
 5. What did you do yesterday? I will go to the park I have been to the park I went to the park I have gone to the park 	 13. The word declare is closest in meaning to: announce claim promise reason
 6. What will you be doing tomorrow? I will be go shopping I am going to shopping I will shopping I will be shopping 	 14. The word carousel is closest in meaning to: toffee roller-coaster moving platform song
 7. Have you visited Paris? I have visited Paris last year I have visited Paris I visited to Paris last year I have visited to Paris 	 15. The word claim is closest in meaning to: announce take promise investigate
8. I would have passed the test if I study hard if I studied harder if I had studied harder if I hadn't studied harder	 16. The word visa is closest in meaning to: an essay a medical paper a travel document a test

APPENDIX 2: PRE-TASK INTERVIEW SCRIPT

PRE-TASK INTERVIEW

- 1. If you had to learn some new English, would you prefer to take a classroom English lesson with a teacher or would you prefer to self-study? Why?
- 2. If you had the choice between a paper textbook, or a digital textbook you could use on your phone / tablet / computer, which would you prefer to study from? Why?
- **3.** Have you studied from a digital textbook before? How did it compare to your experiences learning from a paper textbook?
- 4. What do you think are the advantages of paper textbook over a digital textbook for learning language?
- 5. What do you think are the advantages of digital textbook over a paper textbook for learning language?

APPENDIX 3: POST TASK STIMULATED RECALL PROMPT SHEET

POST TASK INTERVIEW **PROMPT SHEET** 1. How did you feel during this stage of the material? EX: "During this stage of the material, I felt ______." 2. Which aspect of the material was responsible for this feeling? The story The time (pacing) The navigation The electronic dictionary The language The layout The feedback The multimedia Other: please explain 3. How strongly would you rank this feeling? extremely very moderately a little not at all

APPENDIX 4: POST TASK INTERVIEW SCRIPT

POST TASK INTERVIEW

- 6. Overall, how satisfying was the experience?
- 7. How effective do you think the material was for language learning?
- 8. In your opinion, what were some of the advantages of this material over a paper textbook?
- **9.** In your opinion, what were some of the disadvantages of this material over a paper textbook?
- 10. After this experience, if you had to learn some new English and had the same choice between a paper textbook, or a digital textbook (like this one) that you could use on your phone / tablet / computer, which would you prefer to study from? Why?

APPENDIX 5: SAMPLE INTERVIEW TRANSCRIPT

AD: Administrator H: Participant 'Hotel'

HOTEL PRE-TASK INTERVIEW

- AD: This is Hotel's pre-task interview. Alright, Hotel I want you to imagine that you have some new English that you have to learn by this time next week, to accomplish some task. For example, 'opening a bank account'. How are you going to learn this new English? Are you going to have a lesson with a native speaker, like a classroom lesson, one to one, or are you going to self-study?
- H: I will choose self-study first.

AD: Okay. Why?

- H: Uh, because my English level is not very low, er, I have the self-study ability I think. If after self-studying, if something I couldn't understand, I will ask a native speaker.
- AD: Okay. Let's imagine then that you go to a bookstore to find some material to help. You go to the bookstore and you find the perfect book. It's going to teach you how to accomplish this task in English. The shop staff member gives you two options a paper book or a digital e-book which you can use on your iPad or phone. Which would you choose to purchase?
- H: I prefer the paper book.

AD: Okay. Why?

H: I prefer reading on the paper. I don't really like face to the screen to read because if I read in the paper, I can read fast, but on the screen, my mind will go away sometimes.

AD: You mean you will be distracted?

H: Yeah, distracted. You cannot do some notes on the screen.

AD: Okay. So, have ever used a digital book to study from before?

H: Digital?

AD: Yes. Have you ever studied English off an iPad or your phone?

- H: I will use some video, a kind of video. I like to watch a video.
- AD: For watching? But not for reading?

H: No, not for reading.

AD: Okay. So, what do you think are some of the advantages of the paper text book for language learning?

H: For me, I can do some notes. It's more convenient, because, if you want to look again, you can open it anytime, but computer, if you don't have any electronic products, you cannot read it right away.

AD: Is that likely?

- H: Likely?
- AD: That you won't have your phone, or you won't have an iPad or computer? Do you think there are many people who don't have that ability?
- H: I think like... yeah, your phone is always go with you but... it's a small screen anyway. I prefer the paper.

AD: Okay. For making notes?

H: I like the touchy feeling of the paper.

AD: Sure, that's important as well.

H: And you can, how to say, open and find any pages but, if the phone, you only watch the paper, the page, if you want to go back, you have to spend time... I don't know how to say... it's not very..

AD: The navigation is difficult?

H: The navigation is not immediately.

AD: Can you imagine any advantages though, of having your textbook on an iPad instead?

H: Advantage? [*pause*] You can save it, more convenient. You can take it anywhere, and you can read it anytime.

(TASK)

POST TASK STIMULATED RECALL

- AD: This is Hotel's post task interview. Okay Hotel. You started on this screen and you chose the girl. No-one has chosen the guy...
- H: Ha! Yeah...
- AD: And the instructions seemed clear, so you seemed happy with this. You only pressed, that was good.

- H: Yes.
- AD: Then you read a little bit of the beginning of the story.
- H: The background?
- AD: The background, yes, of the story. It explained the task that the material was going to help you complete. You looked at the vocabulary here, and before you answered the first one, you went back and you double checked. Then with questions 1 through 6, you didn't make any mistakes. You got all these right: '*declare*', '*visa*', '*carousel*', which was your new word, but you had no problems, then 'claim the doughnut for yourself', 'the *purpose* of the meeting', '*inspect* the room' and you got the 'good work' feedback here. So, this was Stage 1. Tell me about your feelings during Stage 1.
- H: I liked Stage 1 because it pre-teach some vocabulary. Actually, I know each of the words, the meaning, but some of the words I don't know the meaning used in the airport, so it pre-teached the vocabulary before I do the exercise. It's good because I know the meaning and the exercise helped me to understand the meaning of the vocabulary clear.
- AD: Good. So as a language learning tool, how effective did you feel that was for teaching you the vocabulary?
- H: Yeah.
- AD: How effective do you feel that was?
- H: Very.
- AD: So, words for example like 'claim' that sometimes in academic essays you'd say like, "Jenkins claims that-"
- H: Yeah! 'Claim' is like 'state'... the meaning is... different...
- AD: It's a different meaning, yes. Good, alright. Was there anything else from that stage?
- H: [pause]
- AD: Was it clear what you had to do, and what the task was going to be?
- H: The background also helped me to understand the vocabulary better, and the exercise, yeah.

AD: Alright.

H: It does only one sentence have the background then you need to choose the word.

AD: Was there anything negative or strange that you didn't like at the beginning?

H: No.

AD: You went back once.

- H: Yes. I think six words you learn at the same time that's the perfect vocabulary. It's not too many, or not too less. You can compare different meanings of the vocabularies. The number of the vocabularies.
- AD: After this we got into some grammar. It introduced the future progressive tense, which I'm sure you've seen before, but maybe there was a different usage in the airport situation. You took your time and you read through the examples. Then you answered the four grammar questions "where will you be staying?", "how long will you be staying?", "when will you be departing?" and "will you be working?" This was Stage 2. How did you feel about this stage?
- H: Actually, I have a personal problem when I read the sentence because it's capital. Every letters is capital. It's really hard for me to read fast or I have to think, but it's not very difficult words. So, I can recognize. But sometimes if I meet the vocabulary I'm not very familiar with, I have to change it to the small letters, it's uncomfortable.

AD: Tell me your level of discomfort.

H: This one [points to 'moderate' on prompt sheet].

AD: Moderately uncomfortable, okay. Alright, anything else from the grammar section?

- H: I think the grammar explanation is perfect because it's not too many. Just two examples of explanation compared with longer, you'd need more patience.
- AD: Did you ever feel like this material was going to take a long time, or did you feel like it was going to be a short time progressing through it?
- H: It's okay. I like to touch it. To answer each question and then move on.
- AD: Okay. The next stage, after you learned some vocabulary and grammar, is where you moved back into the story. We're at the airport now. You seemed happy reading the story. With this one...
- H: It was still in big capitals!
- AD: But you chose the right answers, you chose 'foreign passports'. The audio was not clear, you needed some time. You chose 'business'.
- H: It's a kind of listening exercise?

AD: Yes. The Immigration officer asked you, "where will you be staying?". You were looking for the answer option. How did you feel?

- H: It was confusing because each page has the answers I needed, but... Only this page I don't need to answer anything. Probably the answer is next page. I should notice the 'continue'...
- AD: And you did, but that's an important issue. You got onto the page with all the answers, and you looked at it very carefully. Why did you choose this one? [indicates correct answer option]
- H: Because the grammar of these ones is not correct... This one is rude and impolite to the officer...and because the future tense is not this one...
- AD: Okay, so you examined them all but you could identify the correct grammar. Did you feel the grammar that you practiced in the textbook prepared you to answer this?
- H: Yeah.
- AD: Good. Then you chose this one, and the next one, you chose this. Correct. Then you cleared Immigration. So, this was Stage 3. How did you feel about this stage?
- H: Stage 3?

AD: The Immigration section.

- H: It's a kind of an exercise to practice the grammar of the last stage, so the previous stage helped me to finish this part. It's not very difficult. If I didn't learn the previous stage, it probably takes more time to answer the exercise.
- AD: Do you think you still would have got the right answer?
- H: I think so, but, still takes time.

AD: Did you feel it was an effective way of learning language?

- H: Not too easy. Easy and helpful. Very helpful.
- AD: Then you went onto Stage 4, which was Baggage Claim. You got to a corridor and instead of going to Baggage Complaint, you went to Baggage Claim. Why did you go to Baggage Claim, not Baggage Complaint?
- H: Because I don't have any complaints or problems.
- AD: Fair enough. It told you to go to carousel 2, but you listened to the audio and changed your mind and went to carousel 4, which was the correct carousel, so you picked up your luggage easily. It's a very short section, Baggage Claim. How did you feel about Stage 4?

H: You know when I read the sentence, because I have such an experience, my previous experience, and combined with the language, make it easier for me to do the exercise.

AD: Ah, so you have experience going through Heathrow?

H: Yeah.

AD: Did you feel the story was the similar to your experience?

H: Yes, very close to the real life.

AD: Was that a good thing? Does it help with language learning?

H: Yes. Because if it can put our knowledge into practice.

AD: Anything negative at this stage?

- H: Not difficult...A little bit easy.
- AD: Then the last stage was Customs. Now, here you almost pressed this... and you thought about this one... and you also went back a page again.
- H: Because I didn't know if I should declare or not. I should go back to read it.

AD: You double checked?

- H: Yeah.
- AD: And you realized you didn't have to declare?
- H: Yeah.
- AD: So, the story gave you the information that you needed, and you chose the right answer. What do you think would have happened if you had said 'yes'?
- H: She will ask, "what things do you need to declare?"
- AD: And you didn't want to do that. Were you ever curious to give the wrong answer just to see what would happen? Or did you feel if you made a wrong answer, something bad would happen?
- H: Hmmm...?
- AD: Did you ever feel curious to explore? Because this wasn't really you, and it isn't a real situation, so maybe I *will* choose to run...?
- H: I mean, if I chose 'yes,' this machine works...?
- AD: Yes. Were you tempted?

- H: If only for this exercise, I don't want to.
- AD: But if this were your book, would you want to go through it again and try other responses?
- H: Yeah, I will.
- AD: Okay. So, you chose 'no', and that was the best answer because you don't have anything to declare. Then she asks you a question, and you said 'go ahead', you didn't run.
- H: 'Run for it,' I don't know it... what does it mean?
- **AD:** [Gestures running away]
- H: Oh! At the beginning, I left it because I thought it's wrong.
- AD: Yes, you don't have to answer, you can just try to escape. What do you think would have happened?
- H: Security guy will catch you.
- AD: That's right, maybe you already know the result. But you played safe. You got the bag inspection, the customs officer seemed happy, and you got the best ending. You were on time, and your boss is happy. She shakes your hand.
- H: Happy ending!

AD: That's right. How did you feel about Stage 5?

- H: Not very special like previous stage, just move on, move on. But for my level I think the time is not very long. But for lower proficiencies it will be longer. It's very long for them I think.
- AD: Maybe. But not just that, some people are interested in not just what happened here, but maybe going back and seeing what would happen here... to check out other options. But in your case, you wanted to get the best result?
- H: Yeah. Um... it doesn't include a speaking part. Why?
- AD: It doesn't include a speaking part, you're right. How did that feel?
- H: It's a little bit disappointing.

AD: How would that work on this digital device?

H: I guess like when the officer asks you some question, it has a recorder right? You also can record your voice and then probably it can give you some score for the speaking part.

- AD: That's super advanced technology, but with the Alexa app, that's going to start to happen very soon. Soon that will be a possibility. The software does exist, but it's a lot of work.
- H: I see.

AD: Okay, so that was the last stage. Just a few final questions now. Overall, how satisfying was that experience for you?

- H: Very satisfying, because actually I learn in this short time, from this exercise. I learned the grammar and the vocabulary. It's very helpful for me.
- AD: As a language learning tool, how effective do you think that digital book was?
- H: Very.

AD: Any reason why?

- H: Each page there's not very... not too many content on one page. It's kind of fun, you can just touch, move on, touch, move on... at the end you can know the score. It's kind of to test yourself, if you want to know your level or your result...
- AD: If I told you that there were multiple endings to that material, would you be tempted to try it again just to see what other English you can learn in other situations?
- H: Yeah, I will.
- AD: Now that you've had an experience with a digital textbook for language learning, let's go back to the questions at the beginning. What do you think now are the advantages of learning language on a digital text book over a paper text book?
- H: Um, at the beginning when you said digital book, I thought it's only like reading, but this kind of book can, like interaction, have interaction, not just reading, and you can do some exercise. It's a kind of game. It's fun. Because textbooks are kind of boring, you just read and do the notes, but this kind of digital text book you can learn even if there's no teacher, you still can interact with the... knowledge...
- AD: That's important, the autonomous element. You can still learn autonomously, but in an interactive way.
- H: Yeah.
- AD: And after this experience, what benefits do you think a paper book still has over the electronic one?
- H: Paper text book... probably you can do some notes, and add more examples, and vocabulary.

- AD: So, adding notes and more vocabulary. That's important to you?
- H: Yeah.
- AD: Okay, last question. At the beginning, I asked you if you had a task to complete, and you went into a bookshop to get an English book to self-study with, and the shop staff member gave you the choice of a paper book option or an electronic book option... you said you were definitely in favour of the paper book option. After this study, how do you feel?
- H: Hmmm...
- AD: Do you still prefer the paper book, are you more fifty-fifty, or do you now prefer digital?
- H: Fifty-fifty, because when I chose the paper text book at the beginning, I had the traditional mind for the text book.
- AD: Thank you, Hotel.

END

APPENDIX 6: TABLE OF PARTICIPANT FEEDBACK INSTANCES

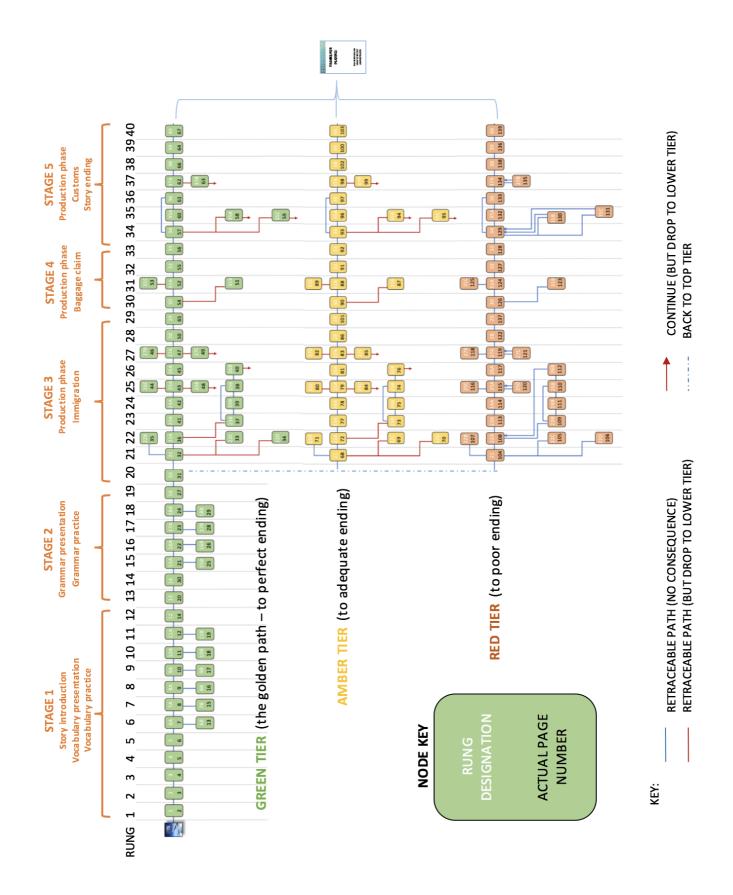
TOTA	TOTAL NEGATIVE FEEDBACK INSTANCES			
1	ALPHA 2-LANG-2-dissatisfied			
2	ALPHA 3-MD-2-frustrating			
3	ALPHA 4-ED-1-disappointing			
4	ALPHA 5-MD-1-disappointing			
5	ALPHA 5-MD-2-disappointing			
6	BRAVO 1-LANG-2-nervous			
7	BRAVO 1-PAC-2-nervous			
8	BRAVO 3-MD-1-confusing			
9	BRAVO 5-LANG-1-afraid			
10	CHARLIE 1-NAV-2-nervous			
11	CHARLIE 2-LANG-1-unenjoyable			
12	CHARLIE 2-LANG-2-nervous			
13	DELTA 1-MD-3-confusing			
14	DELTA 1-NAV-1-nervous			
15	DELTA 3-MD-1-boring			
16	DELTA 3-MD-2-unclear			
17	ECHO 2-LANG-3-easy			
18	FOXTROT 1-LANG-1-anxious			
19	FOXTROT 1-MAT-1-uncomfortable			
20	FOXTROT 2-MD-1-boring			
21	FOXTROT 3-MD-1-disappointing			
	•			
22	GOLF 1-LANG-3-disappointing			
23	GOLF 2-LANG-2-disappointing			
24	HOTEL 2-MD-2-uncomfortable			
25	HOTEL 4-MD-1-easy			
26	HOTEL 5-MD-1-disappointing			
27	JULIET 1-LANG-1-confusing			
28	JULIET 1-MD-2-uncomfortable			
29	JULIET 2-MD-1-confusing			
30	JULIET 4-MD-1-tiring			
	•			
31	KILO 1-ED-1-disappointing			
OBSE	RVATIONS			
1	BRAVO			
	Stage 3. Cog. load – avoided audio player			
2	CHARLIE			
	Stage 1. Disorientation –technical glitch			
3	HOTEL			
	Stage 1. Cog. load – confusion			
4	JULIET			
	Stage 1. Disorientation – looping			
	•			

1	ALDHA 1 LANC 2 motivating			
1	ALPHA 1-LANG-3-motivating			
2	ALPHA 1-NAV-4-motivated			
3	ALPHA 3-ST-3-engaging			
4	ALPHA 5-ST-3-happy			
5	BRAVO 1-ST-3-enjoy			
6	BRAVO 2-LANG-4-enjoyable			
7	BRAVO 3-ST-4-enjoyable			
8	BRAVO 4-MD-3-comfortable			
9 BRAVO 5-MD-4-enjoyable				
10	CHARLIE 1-NAV-4-interesting			
10	CHARLIE 3-NAV-3-motivating			
11	CHARLIE 3-LANG-3-practical			
12	CHARLIE 3-LANG-3-practical CHARLIE 4-NAV-2-easy			
13 14	CHARLIE 4-NAV-2-easy CHARLIE 5-ST-3-comfortable			
14				
15	DELTA 1-ST-3-useful			
15				
16	DELTA 2-LANG-3-clear			
17	DELTA 4-ST-2-satisfying			
18	DELTA 5-MD-3-clear			
19	ECHO 1-MD-3-clear			
20	ECHO 3-MD-2-satisfying			
21	ECHO 5-MD-2-satisfying			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
22	FOXTROT 1-ST-3-engaging			
23	FOXTROT 2-MD-3-clear			
24	FOXTROT 2-FDK-3-motivating			
25	FOXTROT 3-MD-2-satisfying			
26	FOXTROT 4-MD-2-authentic			
27	FOXTROT 5-ST-4-good			
	-			
28	GOLF 1-ED-4-useful			
29	GOLF 3-MD-3-satisfying			
30	GOLF 4-MD-3-authentic			
31	GOLF 4-ED-3-useful			
32	GOLF 5-ST-4-motivated			
	·			
33	HOTEL 3-MD-3-helpful			
34	JULIET 2-LANG-3-comfortable			
35	JULIET 2-ED-3-comfortable			
36	JULIET 5-ST-3-comfortable			
37	KILO 1-ED-3-useful			
38	KILO 5-ST-3-happy			
	·			

APPENDIX 7: TABLE OF PARTICIPANT STATISTICS

Number of participants who		
Preferred to self-study	9	
Preferred classroom study		
Had no preference of study	1	
Had preference of paper text books	8	
Had preference of digital textbooks		
Had no preference of material		
Had prior experience with digital text books		
Got the 'perfect' green ending		
Got the 'adequate' amber ending	4	
Got the 'poor' red ending	1	
Chose male character	1	
Chose female character	9	
Were inspired to replay		
Improved their feeling about hypertext to being 'on the fence'.		
Improved their feeling about hypertext to 'preference'.		
Experienced no change in preference		
Found Business Hero not at all satisfying		
Found Business Hero a little satisfying	0	
Found Business Hero moderately satisfying	4	
Found Business Hero very satisfying	6	
Found Business Hero extremely satisfying	0	
Found Business Hero not at all effective		
Found Business Hero a little effective		
Found Business Hero moderately effective		
Found Business Hero very effective		
Found Business Hero extremely effective		

APPENDIX 8: BUSINESS HERO MAP



APPENDIX 9: BUSINESS HERO USER GUIDE

GUIDE TO USING BUSINESS HERO

The most important criterion of *Business Hero* was that it functioned as a pedagogically effective TESOL textbook. This user guide explains some of the design choices behind its chosen teaching elements.

PLATFORM

An early consideration was to have the material as either a website, or an interactive pdf. Both had their advantages and disadvantages. A website would be unconstrained by the size of its data, and able to handle much more advanced interactive features, like UVic's *Hot Potatoes*© for example. However, by having it only accessible on a website takes the material one step further away from being 'a book', and closer to a 'game'. Readers would need an internet connection to access it, and it would take a large degree if programming skill by the creator. Interactive pdf has more limited interactive features, but is easier to design and create in Adobe *In Design*®, and is accessible either on or offline, meaning it would not cut out going through a train tunnel, as many commuters have no doubt experienced to their frustration. Therefore, interactive PDF was chosen as the platform for the material.

PRESENTATION, PRACTICE, PRODUCTION

For simplicity of structure, it was decided that the text would follow a presentationpractice-production (PPP) style approach, concluding with a communicative production task. Role play is a staple production phase task in classrooms, but as the story was designed to be immersive, it seemed logical and opportune to stage the entire length of *Business Hero*'s sample chapter as one long, second person fictional role play narrative. The narrative begins with a brief scene setting, before presenting new language and running through practice exercises, which were also built into the narrative. The story element then resumed and continued in earnest as the production phase, and tested if the reader could make the best choices through the reading maze based on the new language presented.

NARRATIVE

If successful, the pre-task and post task levels checks would indicate that new language was likely to have been acquired from using the material. However, motivation and engagement are also key attributes of effective language material.

Therefore, the premise for the narrative was also an important consideration. The story needed to be relatable, familiar, engaging and motivating while being kept faithful to the domain. Although essentially hypertext fiction, it was still designed to be a useful text for English for specific purposes (ESP), so it would need to be as faithful in replicating the interactions of the domain as possible to be an effective learning tool (Robinson, 1991). This section outlines the pedagogical requirements the material included to be an effective learning tool. Several scenarios were considered to form the narrative of the story. The ideal scenario was one that would be familiar to the target reader, yet still contain common vocabulary that would be unfamiliar to the B2-C1 CEFR level English student. From experience, the topic of arriving at an airport seemed the best fit, for the following reasons

- It would be familiar to foreign students almost all East Asian students would have gone through the experience at a UK airport.
- 2) There were distinct language items that are commonly unknown at CEFR B2-C1 level (e.g. *carousel*, the usage of *claim* to mean 'take', etc.)
- 3) It would form a logical first chapter of a book about taking a business trip.

Originally the narrative of a student coming abroad for study was considered, but eventually scrapped in favour of a business trip, as coming abroad as a student was something the target reader would have already done, whereas a focus on something that might happen in the future seemed more engaging. The narrative became one of a business student on their first overseas business trip, landing at Heathrow Airport, doing some quick study to prepare just before landing, then proceeding through Immigration, Baggage Claim and Customs before meeting their new boss in the arrivals lounge. Therefore, the material was given the subtitle *Business Hero: Business Trip* (Fig.6).



Figure 6. The first four nodes of Business Hero

THE READING MAZE MAP

The structure of the hypertext's node network was created in two halves. A complete run through the golden path (GP) of the book took the reader through approximately 40 nodes. The first twenty rungs would be fairly linear, with the only possible nodes off the golden path being for the wrong answers during the practice phase (Fig.7). Here, there is no permanent consequence of making a mistake.

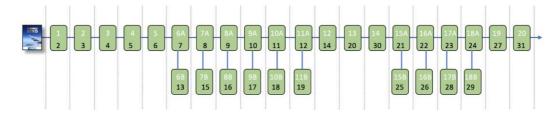


Figure 7. The first 20 rungs of Business Hero

The first few pages gave instructions on how to use the material, allowed the reader to select a character to role-play (another illusionary measure to give players a sense of identity, but the entire text is in the second person, and non-gender specific), and briefly set the scene of the story. Following that, there was the presentation phase, which introduced new language vocabulary, followed by the practice stage. After this, another presentation stage of grammar, followed by more practice. Finally, the 20th node of the GP took readers back into the story. This makes up the first half of the book. Although some pages followed each other sequentially, many are out of order. It was important to stagger pages out of order to emphasize that the book's pages should not and could not be read consecutively (and make sense).

In the second half of the material, the text becomes much more non-linear. To lead readers into three different endings, three separate and near identical paths were created: The green tier, the amber tier and the red tier. The green tier represented the GP, and led to the 'perfect' ending. From this point on however, the reader is in the production phase of the lesson, and mistakes have permanent consequences. Any incorrect response along the green tier leads to a node on the amber tier, which leads to the 'adequate' ending. Another mistake along the amber tier drops the reader onto the red tier, culminating in the 'poor' ending. A complete node network map of *Business Hero* can be found in Appendix 8.

ACTIVITIES AND MULTIMEDIA

Adobe *In Design*® interactive pdf. allowed for some limited interactive, multimedia features. Due to the nature of hypertext, the most intuitive activity to create is multiple choice. One answer takes you to one node A, and the other to node B for feedback. This method was used for both practice exercises in the practice phase. However, even with multiple choice, there is a wide range of styles to engage readers. Throughout the production phase, narrative branches are discovered through choices made by the reader, and to make the roleplaying experience as authentic as possible, and to add challenge, embedded audio tracks are used to allow the immigration officer, baggage claim announcement and customs officer to speak directly to the reader. Different genders and UK accents are employed for greater authenticity. Responses to the audio are made possible through multiple choice options (Fig.8)



Figure 8. Examples of nodes with multiple answer options and the audio player.

VOCABULARY

There were six key vocabulary items chosen for the lesson (two for each area of the airport encountered). They were:

- Purpose
- Visa
- Claim
- Carousel
- Inspect
- Declare

For the vocabulary practice, a multiple choice cloze activity was chosen. A sentence with a gap is presented, and readers choose from the 6 key language items to complete it. Despite having 6 available answers, each question only requires two feedback nodes, one with a 'try again' message. For an incorrect selection (with only a 'back' option), and one with a reward feedback message for a correct answer, that allows the reader to continue (Fig.9)

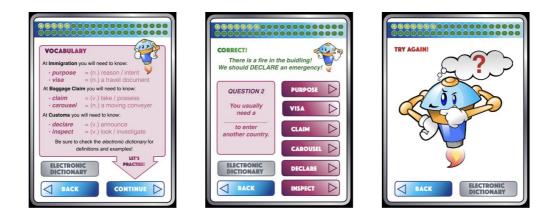


Figure 9. Examples of vocabulary presentation, practice, and feedback.

GRAMMAR

The grammar selected for the material was the future progressive tense. Although arguably a little easy for a B2-C1 learner, it was chosen because it fits the domain best, with airport staff frequently employing it for its formality ('Where will you be flying to today?', 'How many bags will you be checking', 'How long will you be staying?' etc.). For the grammar practice, only four questions were selected to round the practice activity up to an even 10 questions. Due to its perceived ease, it is kept short, and gives the reader an easy win for motivation. For this section, multiple choice is also used, but this time, the answer is given, and the reader must choose the question. There are only two options, a correct and incorrect option, and as before, only two feedback nodes, one with only a 'back' option, and one that allows continuation. This builds consistency into the design which to help alleviate anxiety (Fig. 10).

The future progressive tens will be ve	C C
X: "I will be travelling in t	ousiness class."
X: "Will you be checking	any bags?"
X: "I won't be eating the	airline's food!"
The future progressive airports, because they and everything takes	are formal places,
Be sure to check the e more exa	
ELECTRONIC	LET'S PRACTISEI





Figure 10. Examples of grammar presentation, practice, and feedback.

APPENDIX 10: PARTICIPANT INFORMATION SHEET

LINEARIZING NON-LINEAR HYPERTEXT

INFORMATION SHEET

This study is to observe and record the efficacy of hypertext as second language learning material.

HYPERTEXT is a digital medium, where the reader is taken to different pages and results depending on the interactive choices they make in the story. It is not linear like a paper textbook.

What will be asked of you if you participate:

1) An English language level check. There will be 16 short multiple choice questions.

TIME: 10 minutes (approx.)

PURPOSE: To confirm the hypertext material is an appropriate level for you to read and study. There is no reward or negative consequence of this check.

2) A short pre-task interview.

TIME: 10 minutes (approx.)

PURPOSE: To record pre-conceived opinions about digital and paper-based learning material before the study.

3) Complete **one chapter** of an autonomous digital hypertext English language learning material on I-pad. The screen will be recorded.

TIME: 30 minutes (or until finished).

PURPOSE: To experience second language learning through a digital, hypertext medium.

4) A **post task interview**. While reviewing your progress, you will take part in a semi-structured interview about your feelings using the material at various points throughout the chapter.

TIME: 30 minutes (approx.)

PURPOSE: To record your feelings and observations of using a digital textbook for learning English.

1) Complete the **level check** once more.

TIME: 10 minutes (approx.)

PURPOSE: To see if the material has been effective at introducing and teaching new language.

CONSENT FORM

As an informed participant of this experiment, I understand that:

- 1. My participation is voluntary and I may withdraw at any time, without penalty.
- 2. I agree to my nationality, language level, I-pad screen, and opinions being recorded in this study.
- 3. I am aware of what my participation involves.
- 4. The potential time and requirements of participation involved in this study have been explained to me.
- 5. All my data (i.e. level check results, nationality, and answers to the questions) will be stored securely and will be kept confidential.
- 6. If you would like your data removed from the database, this can be done by contacting the researcher through the email provided in your copy of the information sheet, up to a week following your participation.
- 7. I agree for my data from this study to be disseminated at academic conferences and meetings, in publications, and to non-academic audiences in the form of public engagement events and articles. I will not be identifiable in any way.

Participant's signature	_ Date
Researcher's signature	_ Date

APPENDIX 12: BUSINESS HERO

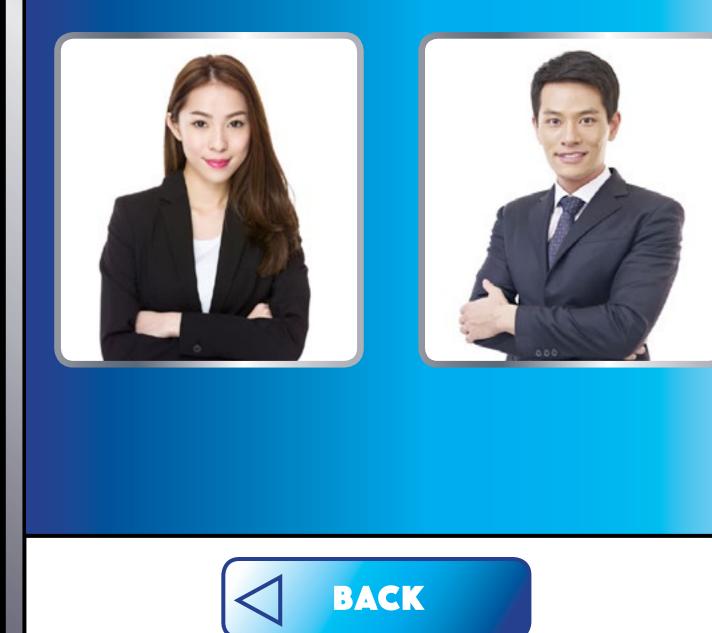
(See attached CD ROM / pdf.)

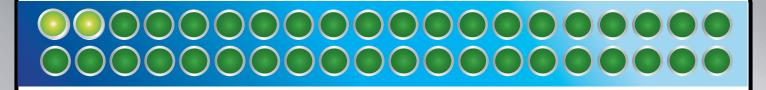
BUSINESS HERO

BUSINESS TRIP

CONTINUE

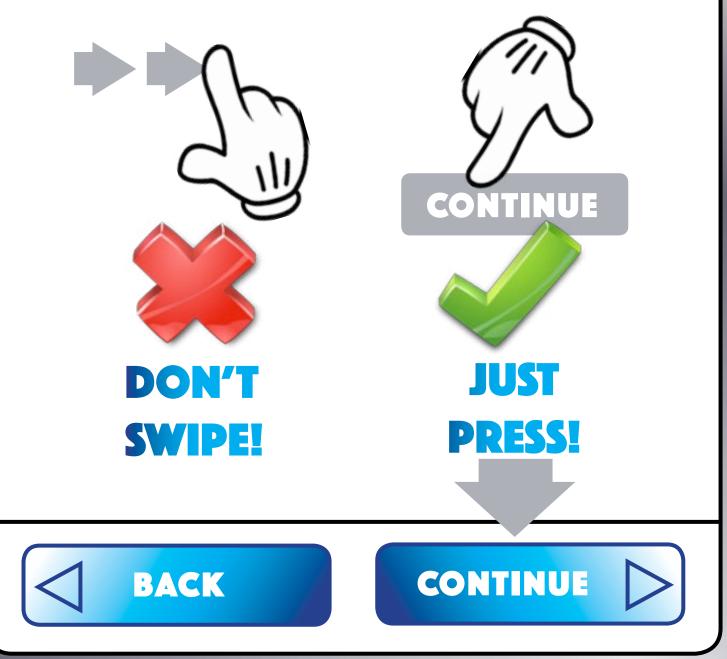
CHOOSE YOUR HERO!





CHAPTER 1: ARRIVING IN THE UK

REMEMBER:

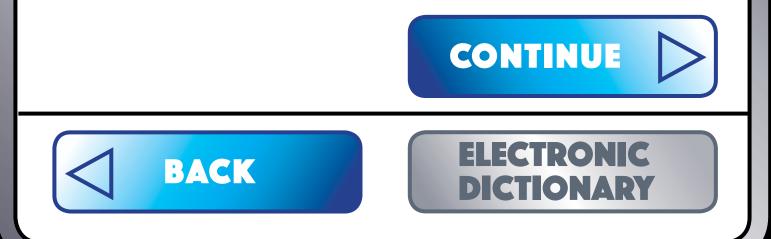


ON THE PLANE

The plane is about to land at Heathrow Airport. The flight was smooth, but you are still **anxious**. You have been studying English for a long time, but this is the first time you will be required to use it in real situations.



You are about to start your new life in the United Kingdom. You agreed to transfer to the English branch of your company, Firetop Inc. as you had the most English experience. The transfer came with a **potential** promotion and salary increase, but first you will have to prove that your language skills can meet the challenge!



Your new boss will be waiting to meet you at the airport, and you want to make a good first impression by being on time. You will have thirty minutes to clear immigration, baggage claim, customs and exit the airport. Any mistakes in your English could cost you valuable time so be careful!



You decide you'd better study up before you land!



ECTRON

VOCABULARY

At Immigration you will need to know:

- *purpose* = (n.) reason / intent
- **visa** = (n.) a travel document

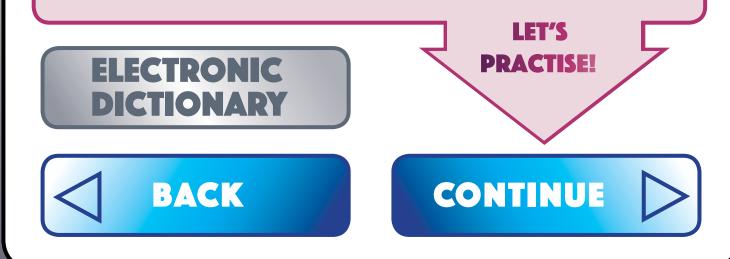
At Baggage Claim you will need to know:

- claim = (v.) take / possess
- *carousel* = (n.) a moving conveyer

At Customs you will need to know:

- declare = (v.) announce
- *inspect* = (v.) look / investigate

Be sure to check the *electronic dictionary* for definitions and examples!



PRACTICE!

Choose the correct vocabulary item to complete the six sentences!



QUESTION 1

There is a fire in the building! We should

an emergency!

ELECTRONIC DICTIONARY

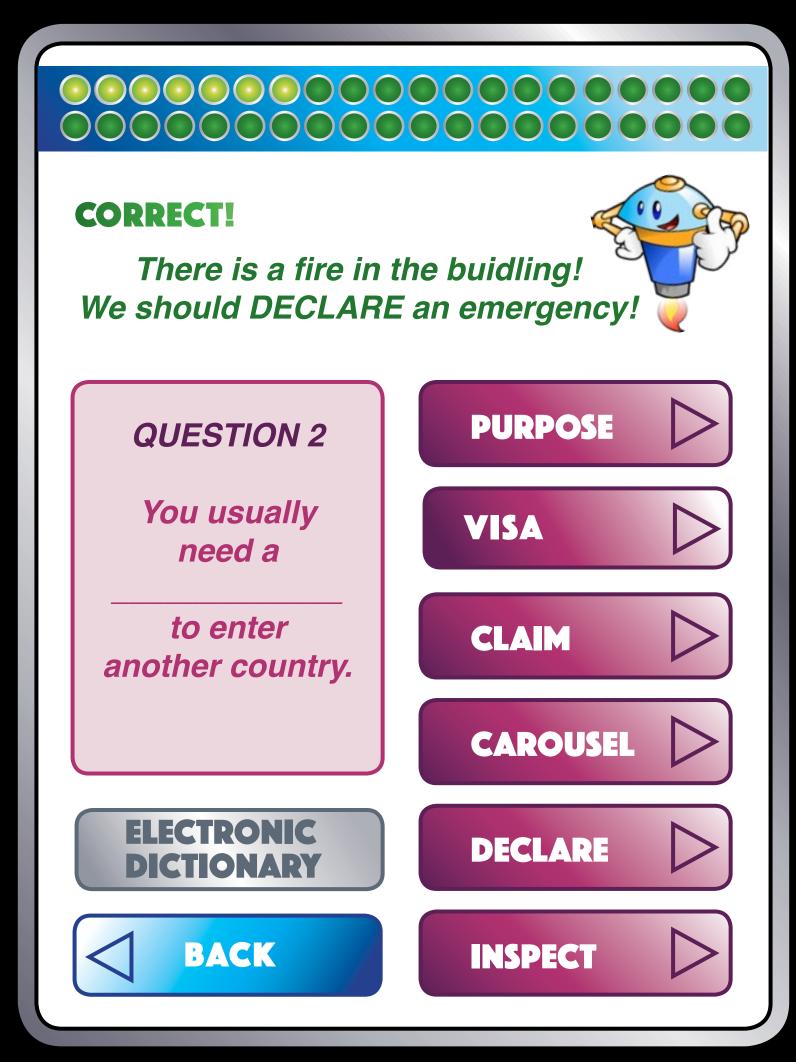
BACK

VISA CLAIM CAROUSEL

PURPOSE

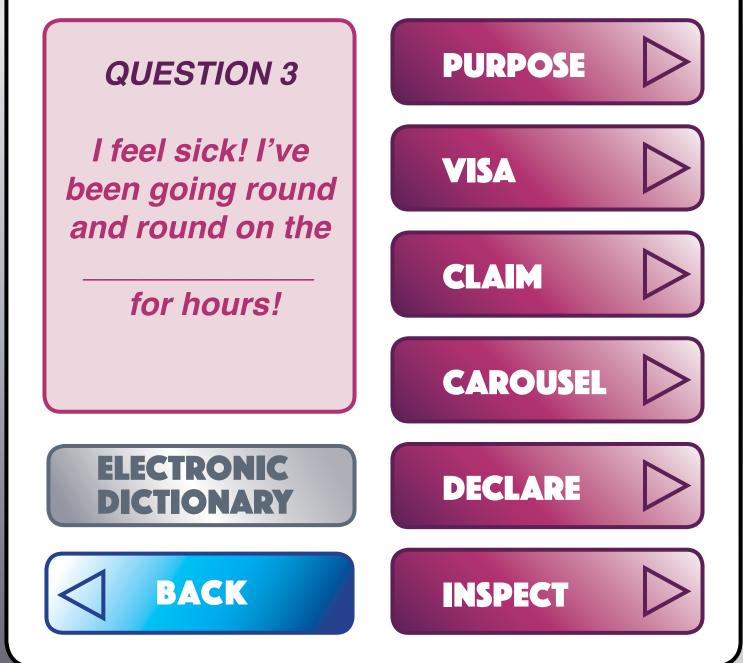
DECLARE

INSPECT

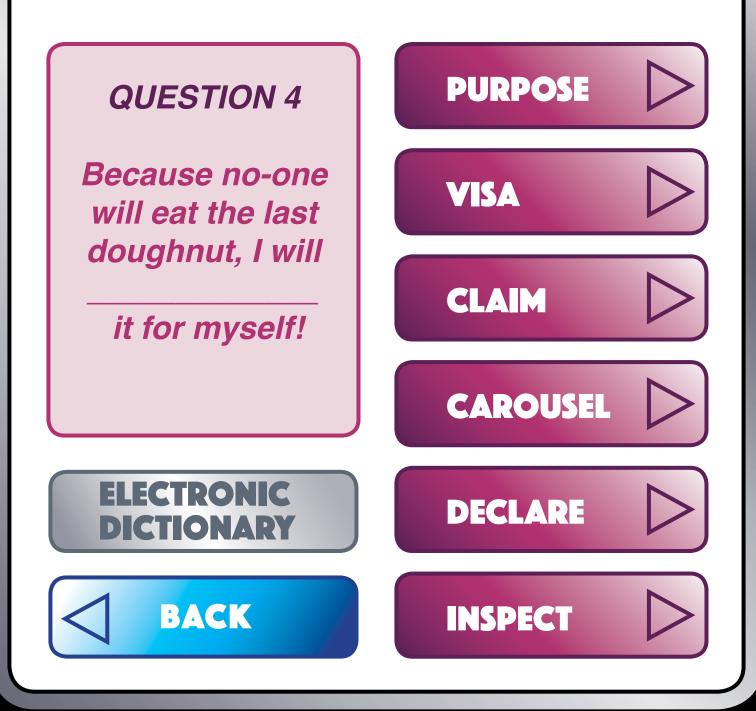


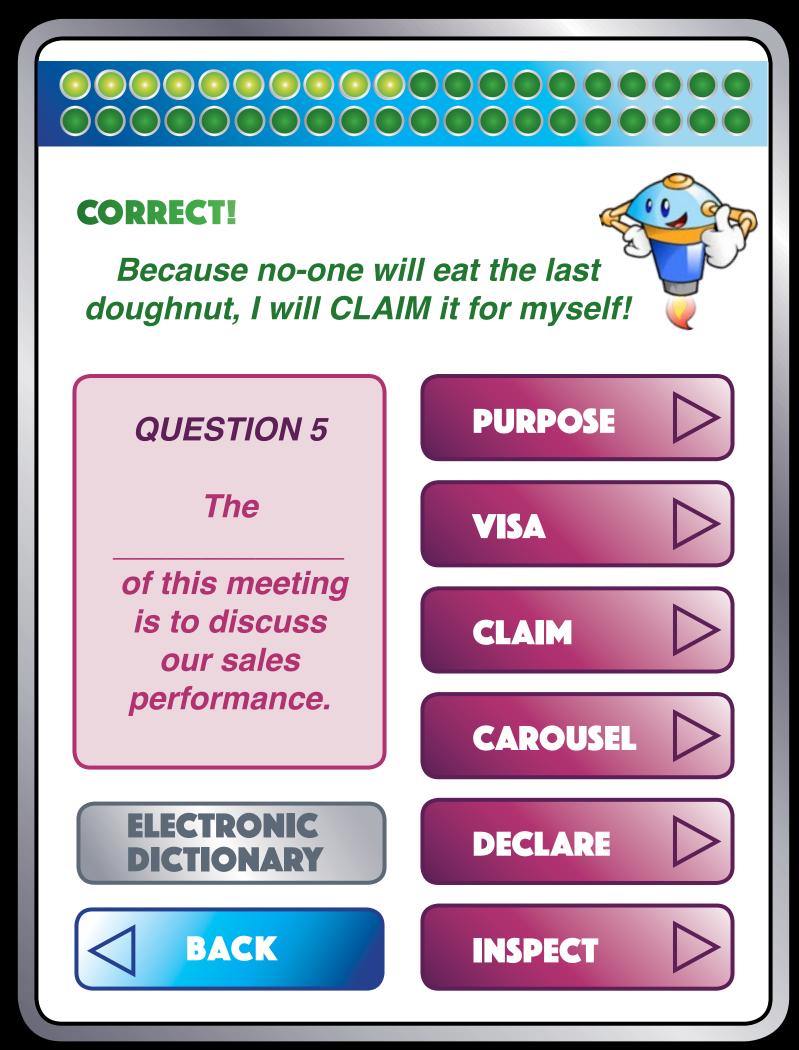
You usually need a VISA to enter another country.





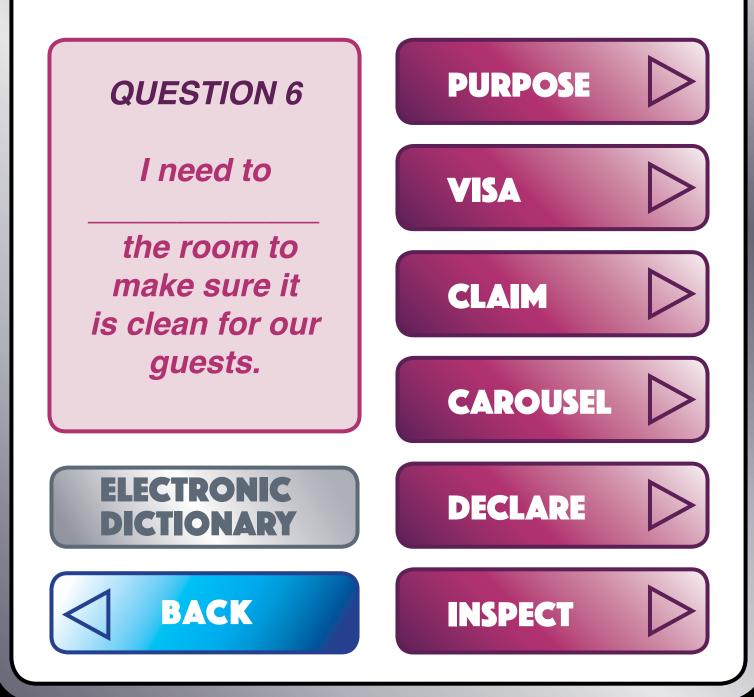
I feel sick! I've been going round and round on the CAROUSEL for hours!

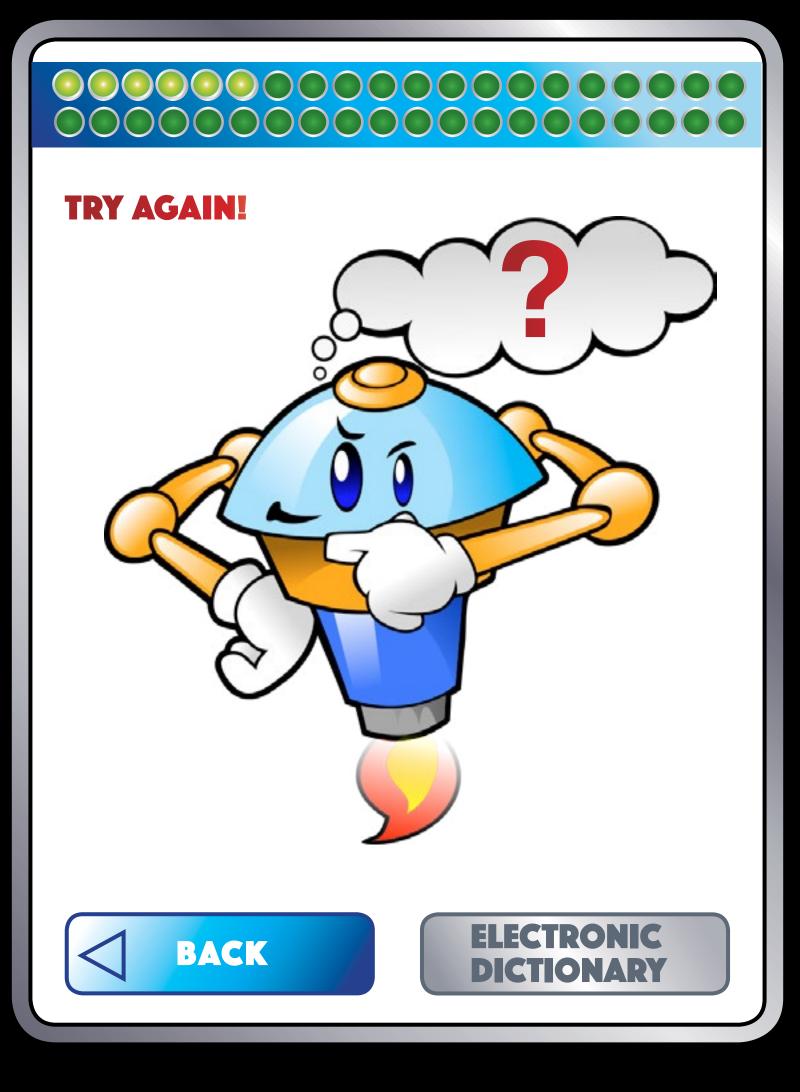




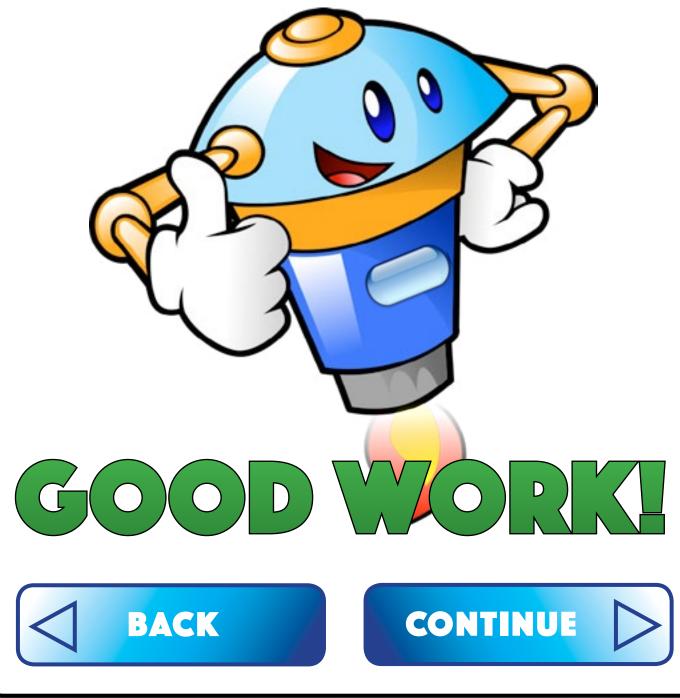
The PURPOSE of this meeting is to discuss our sales performance.





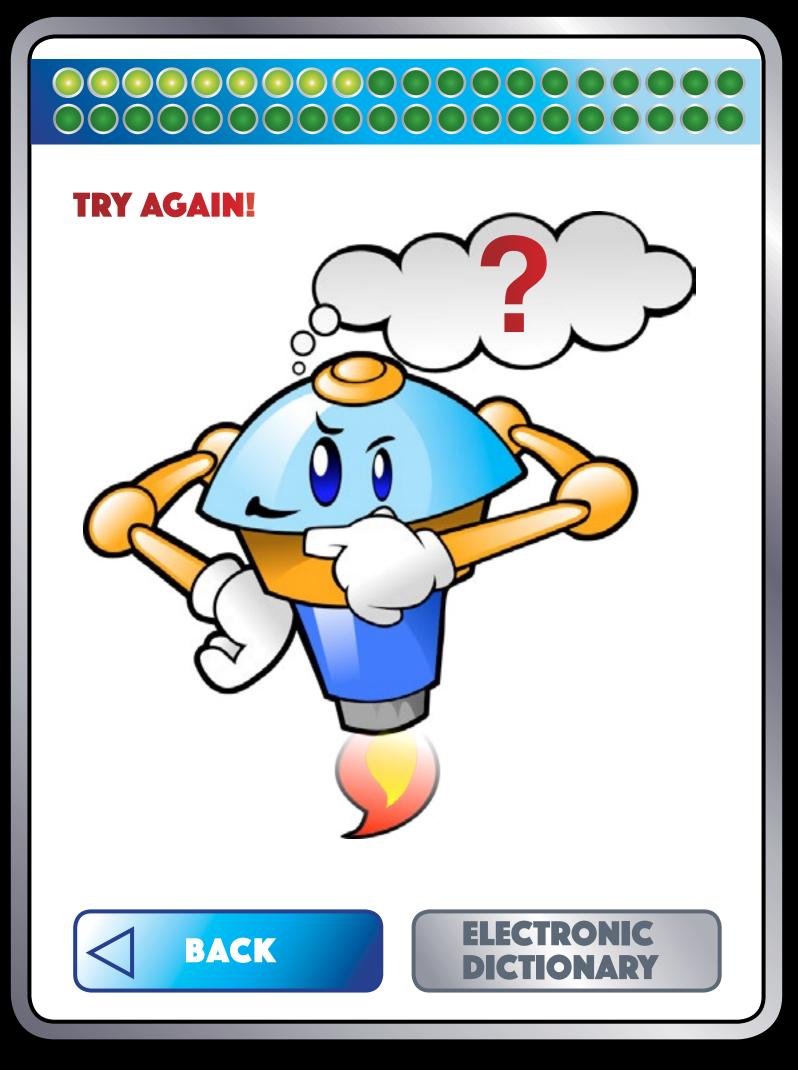


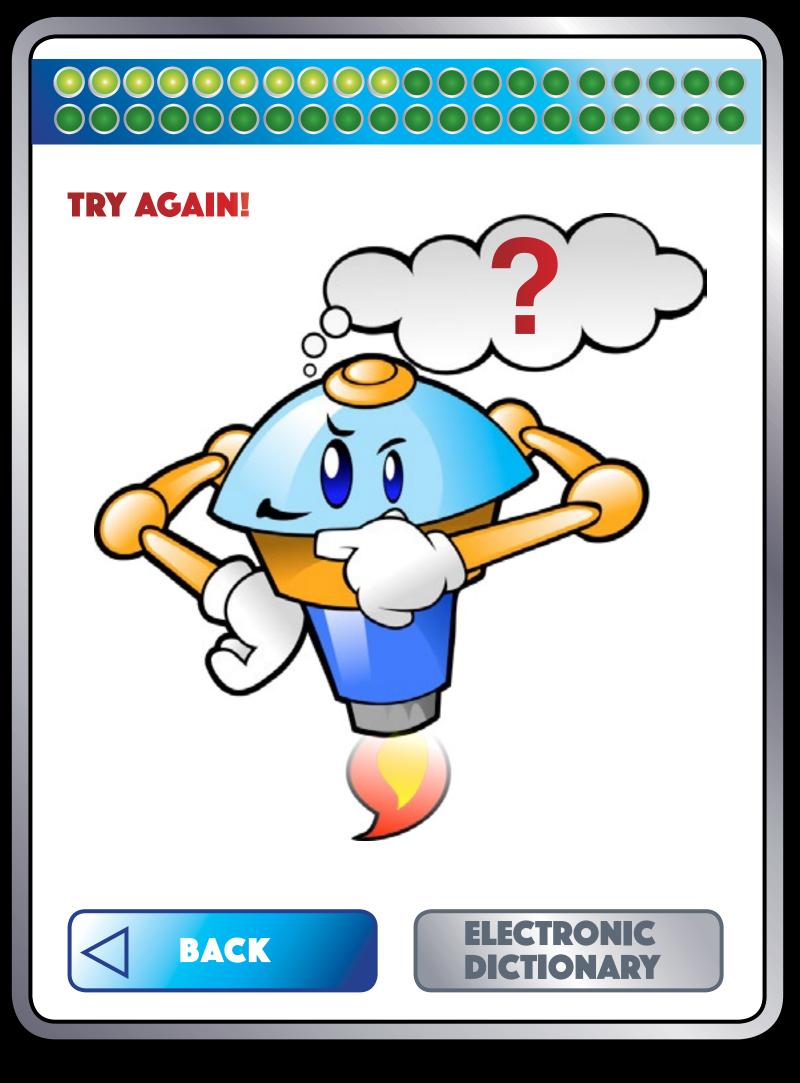
I need to INSPECT the room to make sure it is clean for our guests.

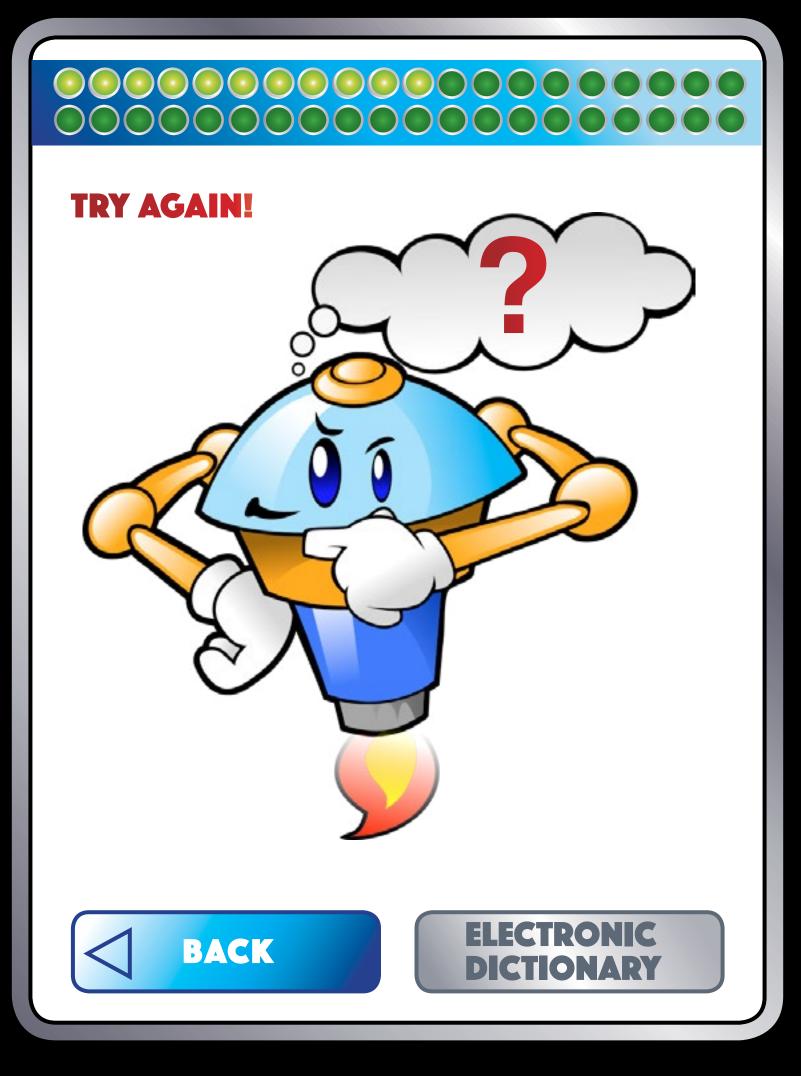












GRAMMAR

The future progressive tense

When used independently, the future progressive tense can serve two useful functions:

 It sounds more formal than the future simple: EX: "The flight will be boarding at 6pm." sounds more formal than "The flight will board at 6pm."

2) It gives the feeling of a long time action:w EX: "I will be flying to London tomorrow." sounds like it will take a longer time than "I will fly to London tomorrow."

ELECTRONIC DICTIONARY

ВАСК

CONTINUE

PRACTICE!

Choose the immigration question below that best matches the given answer!

QUESTION 7

WHERE WILL YOU BE STAYING?

WHO WILL YOU BE STAYING WITH?

I WILL BE STAYING AT THE CHERATON HOTEL.





Where will you be staying?

QUESTION 8

HOW OFTEN WILL YOU BE STAYING IN THE UK?

HOW LONG WILL YOU BE STAYING IN THE UK?

I WILL BE LIVING HERE FOR SIX MONTHS.





How long will you be staying in the UK? I will be living here for six months.

QUESTION 9

WHERE WILL YOU BE DEPARTING THE UK?

WHEN WILL YOU BE DEPARTING THE UK?

I WILL BE LEAVING ON MARCH 1ST.





CORRECT!

When will you be departing the UK? I wil be leaving on March 1st.

QUESTION 10

WILL YOU BE WORKING WHILE YOU ARE IN THE UK?

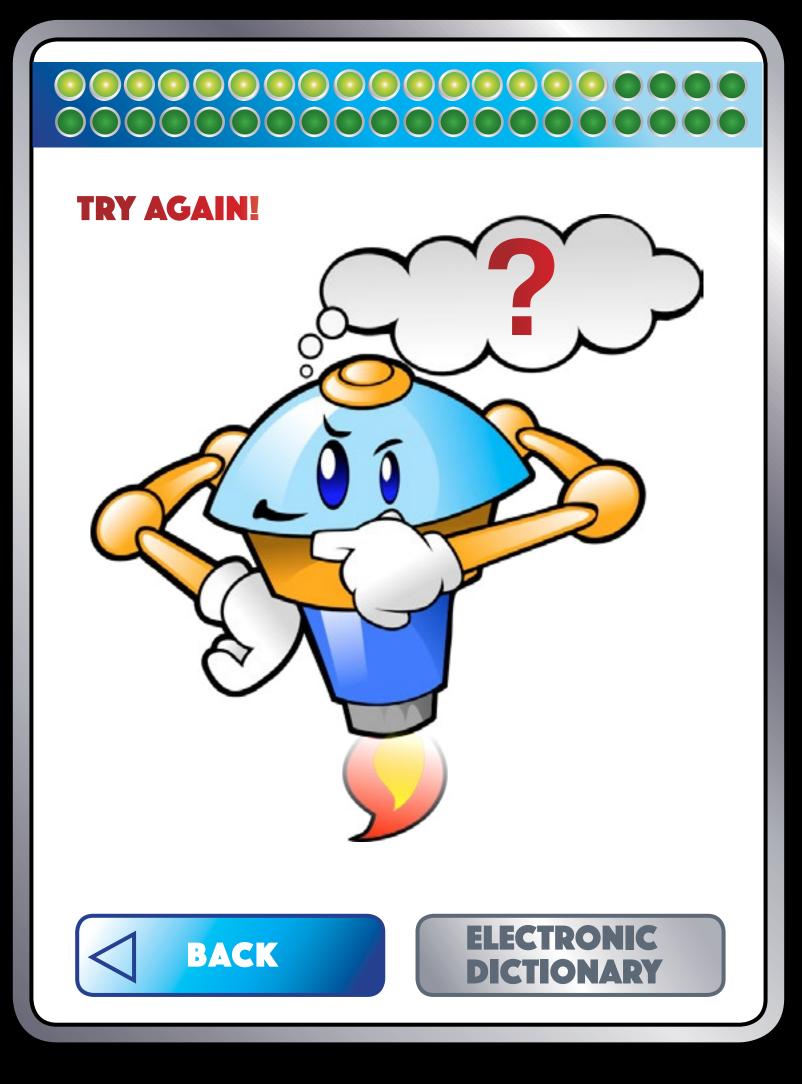
WILL YOU BE WALKING WHILE YOU ARE IN THE UK?

YES, I'LL BE DOING BUSINESS.

007

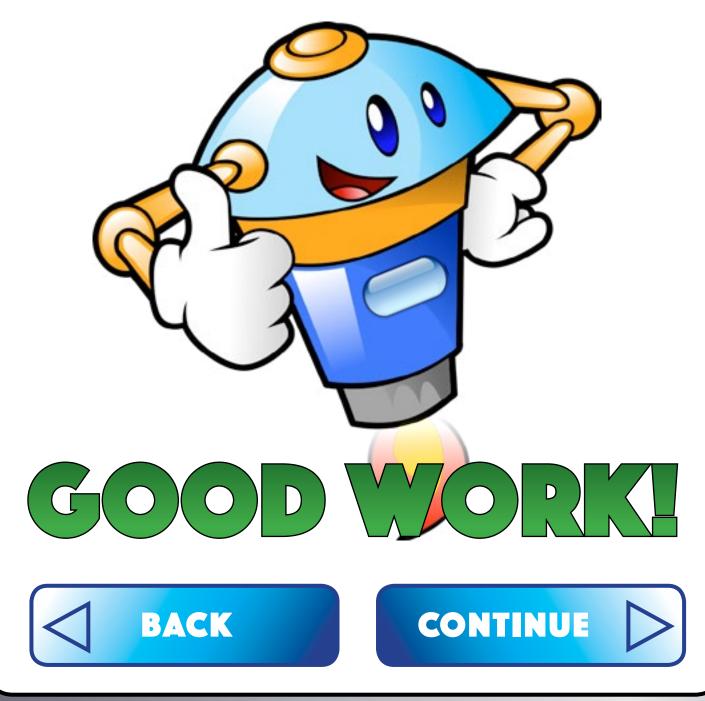




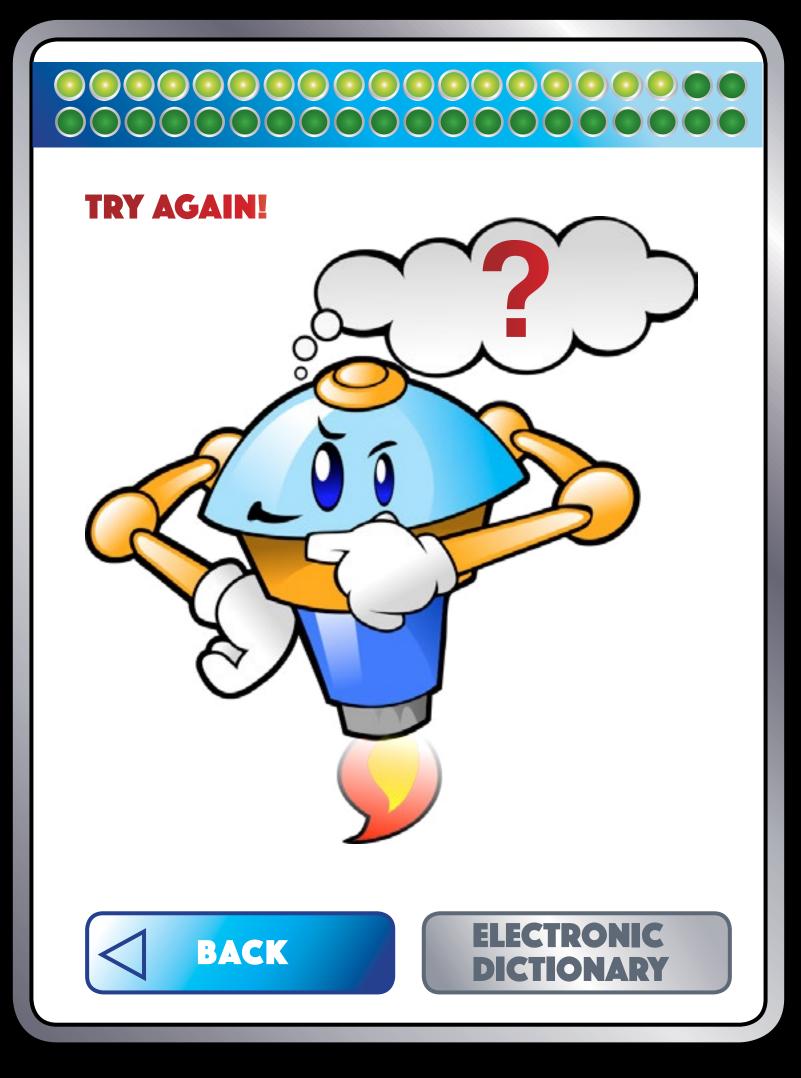


CORRECT!

Will you be working while you are in the UK? Yes, I'll be doing business.







007

The future progressive tense is formed with:

will be verb + ing

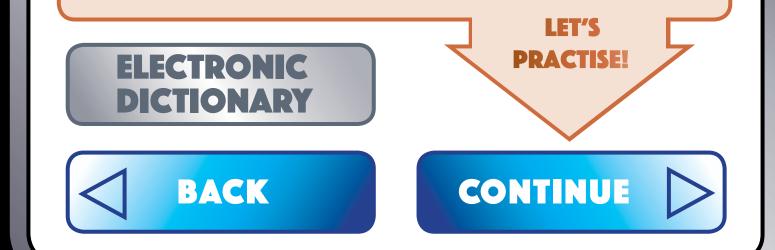
EX: "I will be travelling in business class."

EX: "Will you be checking any bags?"

EX: "I won't be eating the airline's food!"

The future progressive tense is used a lot in airports, because they are formal places, and everything takes a long time!

Be sure to check the *electronic dictionary* for more examples!



AT THE AIRPORT

You have studied everything you need to know to get through the airport. Now it's time to put it to use!

You **disembark** the plane, and make your way into the airport. It is 6am in the UK, and the cloudy sky outside the windows **glows** warm with the morning sun. You adjust your watch, and follow the other passengers. After a long walk down many corridors, You finally arrive in a large hall.



CONTINUE

ELECTRONIC

ICTIONARY

IMMIGRATION

You are in the main immigration hall. There are many people from all over the world, with passports of all different colours. There are also many ropes dividing the hall into separate lines. There are four **queues** ahead of you, each with a sign next to it. Which one will you join?







UK RESIDENTS

NO!

OKAY!

You line up for five minutes and finally get to a counter with a staff member.

HELLO. DO YOU HAVE A UK PASSPORT?

I SEE. I'M AFRAID YOU JOINED THE WRONG LINE. YOU NEED TO GO BACK AND JOIN THE LINE THAT SAYS 'FOREIGN PASSPORTS', OKAY?

Slightly **embarrassed**, you go back to where you were and read the signs more carefully.

ELECTRONIC

CTIONAD



THE RESTROOM

You line up and use the restroom. After a long flight, it feels good to relax!



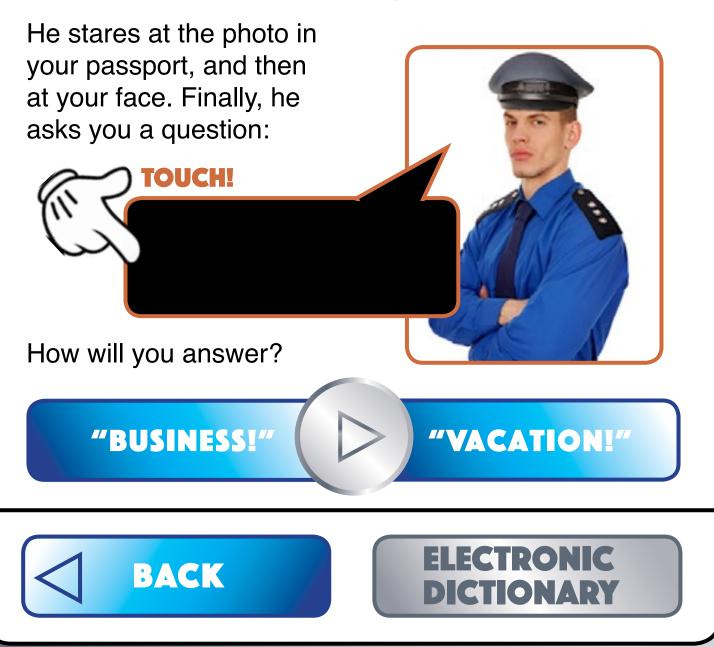
You leave the restroom feeling refreshed and comfortable. Using the restroom seems to have focused your mind and give you **clarity**! Or, maybe it was because you used the time in the restroom to check the English in your dictionary! Either way, the choices in immigration seem easy now. You realise you need to join the line with the sign that says 'foreign passports'! You return to immigration.

ELECTRONIC



FOREIGN PASSPORTS

You line up for five minutes and finally get to a counter with a staff member. The immigration officer looks like he is having a bad day, but you smile as you hand over your passport and landing card.



VISA

The imigration officer looks again at your landing card, and seems suspicious...





What will you do?

SHOW YOUR DOCUMENTS





TOURISM

The immigration officer looks at your visa documents. It clearly states the purpose of your visit is business, not **tourism**. It's not a good idea to **lie** to immigration officers! He seems quite angry now.



Before you can explain, the officer speaks into his radio, and two security officers arrive at the counter. They ask you to come with them... you don't argue!



CREDIT CARD

You take out the Visa credit card from your wallet and give it to the officer.



You give the immigration officer all your paperwork, but he doesn't look happy. After he looks through all your documents, he finds your visa papers. You smile at him **innocently**.



SECURITY OFFICE

You are taken to a private room in the security department. It's scary! After waiting for a long time, a security officer arrives and asks you many questions about your trip. You explain that you panicked, and apologize for any **misunderstandings**. Finally the security officer agrees to let you continue with the immigration process.

You are escorted back to the immigration counter. The immigration officer does not look thrilled to see you again. You had better answer his questions truthfully!



CONTINUE

BUSINESS

The immigration officer looks at your visa documents. It clearly states the purpose of your visit is business, not tourism. He seems happy and gives you an encouraging 'thumbs up'!







MORE QUESTIONS

The immigration officer is still looking serious. You prepare yourself for his next question. Listen carefully!



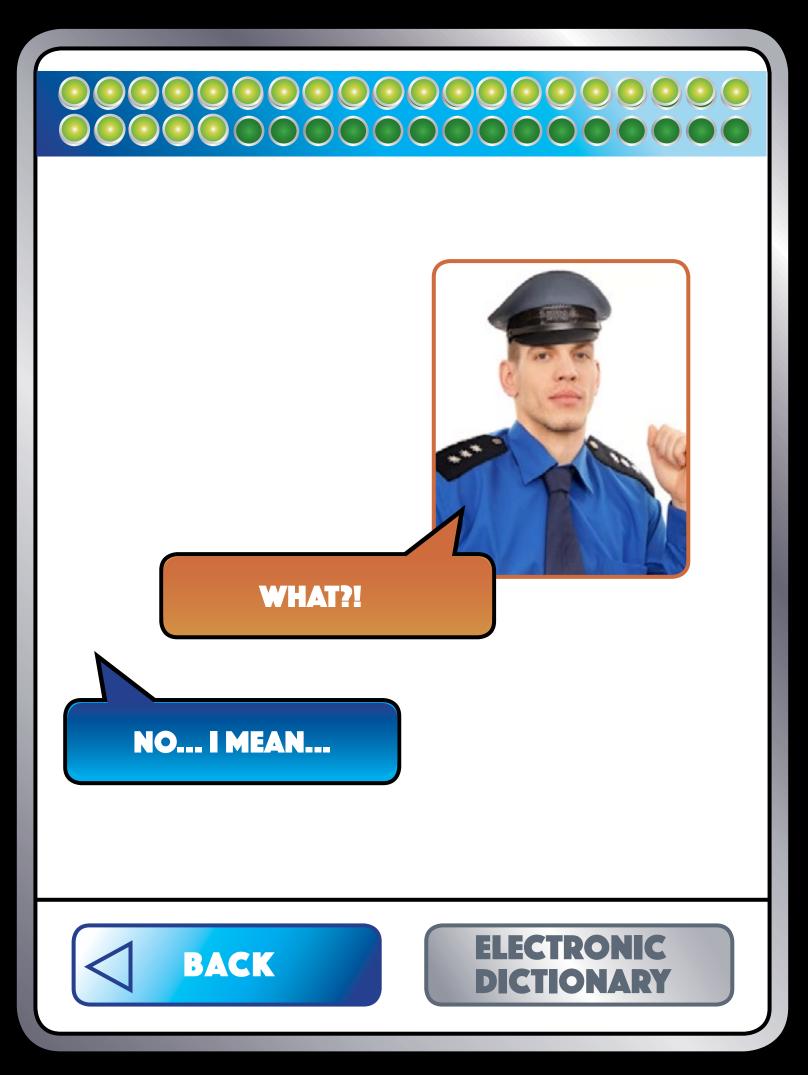
How will you answer?

TOUCH!

CONTINUE



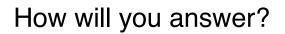




FINAL OUESTION

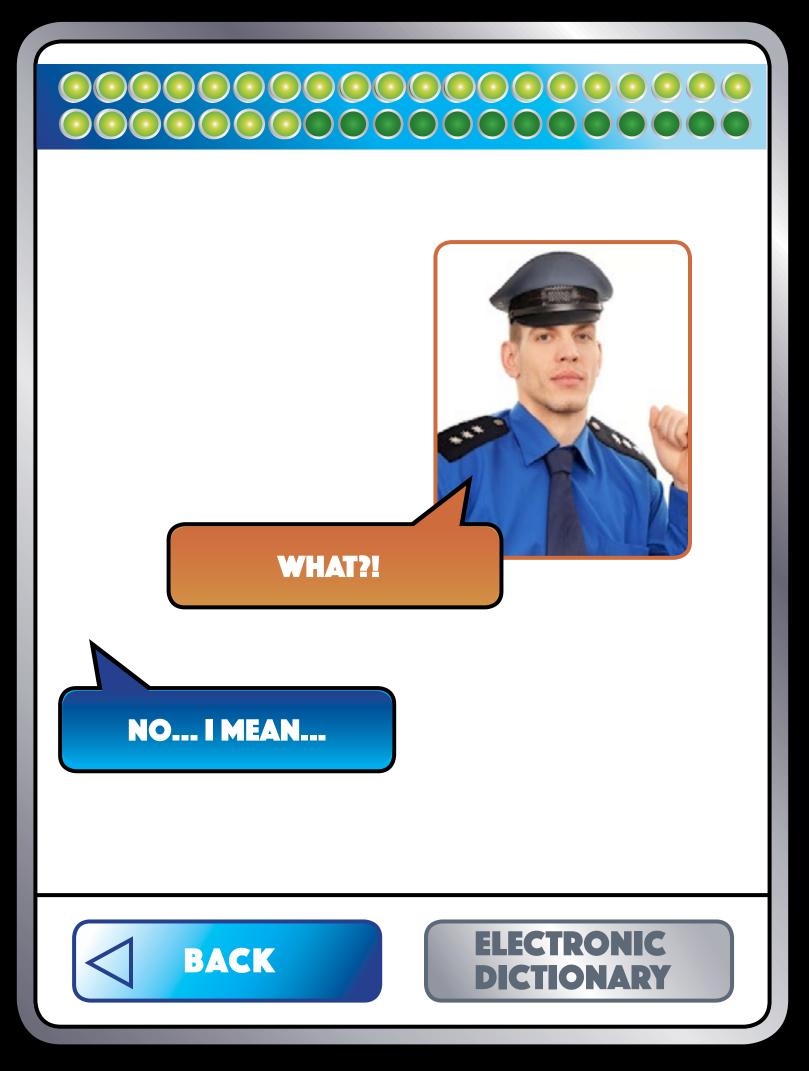
The immigration officer nods at you seriously. He looks like he has one more question to ask you.

TOUCH!



CONTINUE







SECURITY OFFICE

You're fast, but not fast enough! You are caught by two immigration officers and taken to a private room in the security department. It's scary! After waiting for a long time, a security officer arrives and asks you many questions about your trip. You apologize, and explain that you **panicked**. Finally the security officer agrees to let you continue with the immigration process.

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CONTINUE

LECTRONIC

SECURITY OFFICE

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CONTINUE

IMMIGRATION CLEARED!

The immigration officer stares at you for a moment. Then he stamps your passport and hands it back to you. He smiles and tells you to have a pleasant stay in the UK. Well done on making it through immigration!



CONTINUE

CTONARY

BAGGAGE COMPLAINT

You arrive at a counter. There are not many people around, and you can not see any baggage. The clerk behind the counter greets you with a smile.



HELLO. DO YOU HAVE A PROBLEM WITH YOUR BAGGAGE?

NO. I JUST WANT TO COLLECT MY BAG.

I SEE. THANK YOU!

OH, THEN YOU NEED BAGGAGE CLAIM. IT'S BACK DOWN THE HALL.

Slightly **embarrassed**, you walk back down the hall and take the corridor towards baggage claim.



BAGGAGE CLAIM

Which carousel will you go to?

BACK

You are in a room with a lot of **conveyer belts**. You take out the boarding pass from your pocket to check your flight number. You arrived on flight JB007.

The electronic information board says baggage from this flight will arrive at carousel 2. On your way there, you hear an announcement: **TOUCH!**

ELECTRONIC

DICTIONAR

WAITING....

You wait for a long time at the carousel, but no baggage arrives. There are also no other passengers around. Perhaps you had better make another choice.



ELECTRONIC

DICTIONARY



A FORK IN THE ROAD....

You arrive at a **fork** in the corridor. To the left, the sign points to 'baggage claim'. To the right, the sign points to 'baggage complaint'. Which way will you choose?



BAGGAGE CLAIM





CAROUSEL 4

You trust the announcement and go to carousel 4. Luckily, your suitcase is one of the first onto the **conveyor**! You grab it, and make your way to the final area. You've almost left the airport, there is only one last place to visit!



CONTINUE

ELECTRONIC

ICTIONARY



CUSTOMS

You drag your suitcase to the customs area. You don't have any taxable or duty free items in your baggage, so you hope it goes smoothly. You did buy a lot of allergy medicine before you left, but you don't have to declare that!

You are stopped by a customs officer. She checks your passport and customs declaration card. She looks like she is going to ask you some questions...



CONTINUE

ELECTRONIC

MORE QUESTIONS!

You listen carefully to the custom officers question:

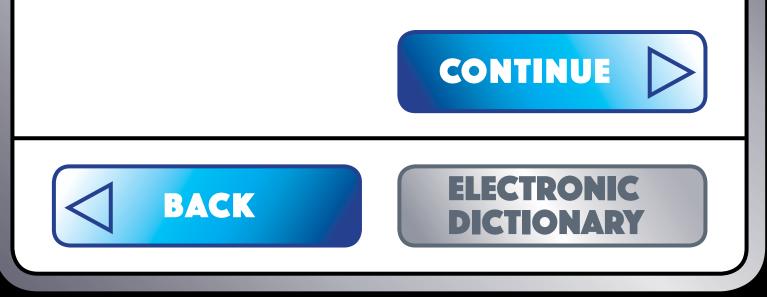
TOUCH!

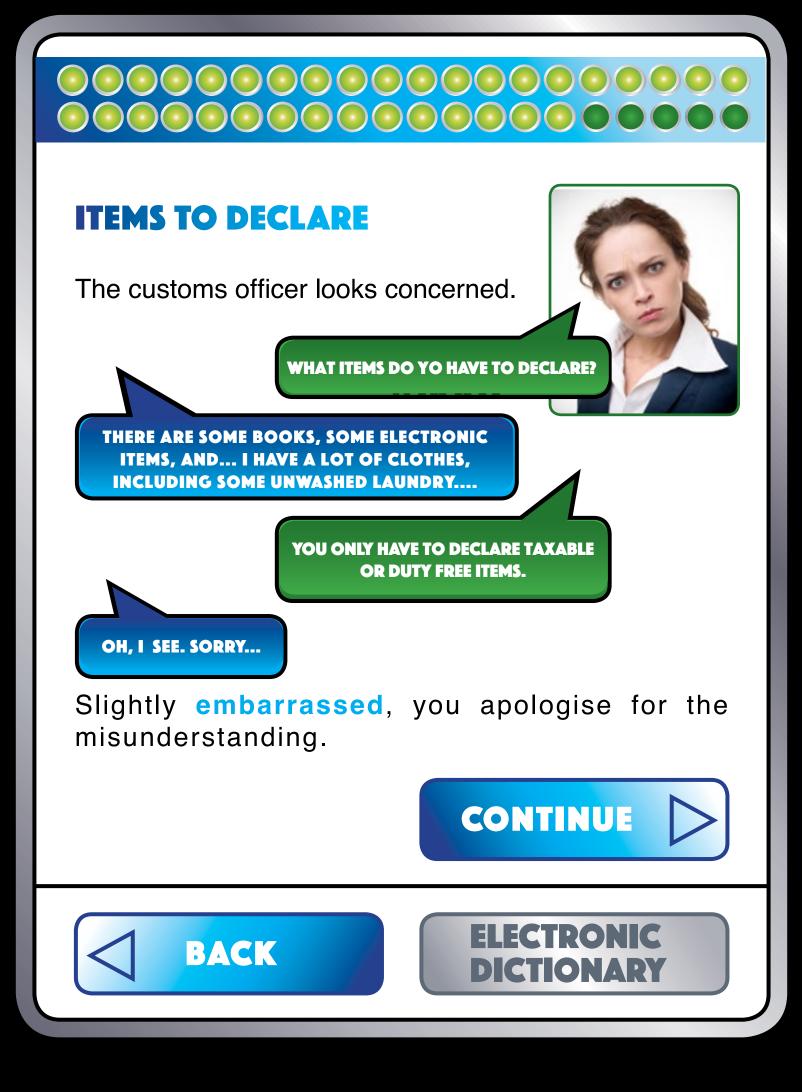
How will you answer?

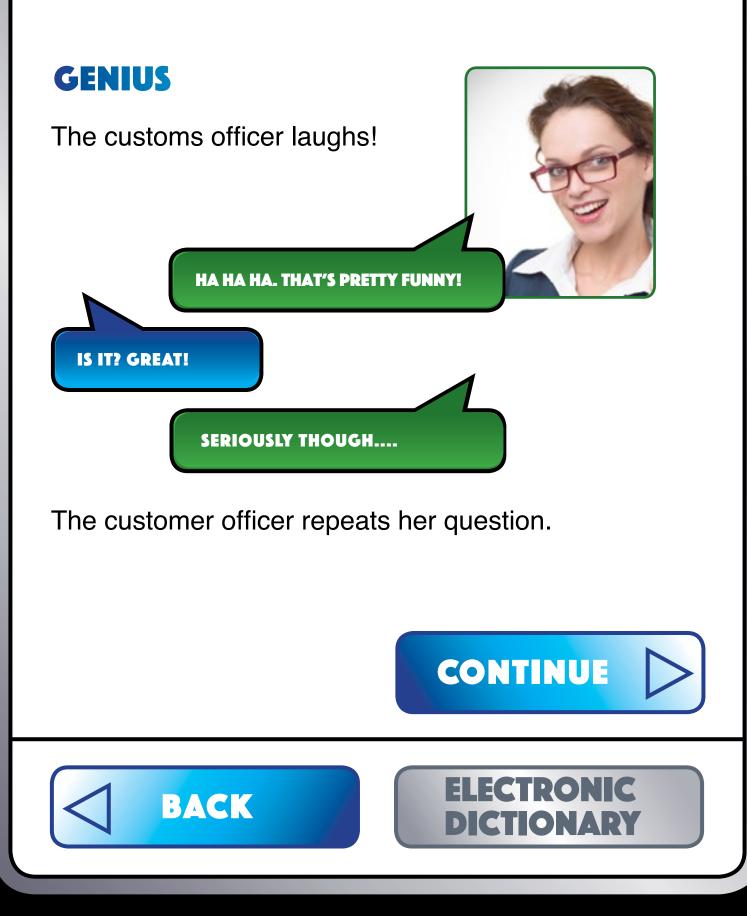




The customs officer explains that while in the UK, you probably shouldn't refer to medicine as 'drugs', as it has other meanings here. Slightly **embarrassed**, you apologise for the misunderstanding.







NOTHING TO DECLARE

The customs officer looks happy that your answer matches the one on your **declaration card**! Phew!



CONTINUE



FINAL OUESTION!

TOUCH!

You listen carefully to the custom officer's question:



"PLEASE, GO AHEAD!"





SECURITY OFFICE

You're fast, but not fast enough! You are caught by two customs officers and taken to a private room in the security department. It's scary! After waiting for a long time, a security officer arrives and asks you many questions about your trip. You apologize, and explain that you **panicked**. Finally the security officer agrees to let you continue with the customs inspection.

You are escorted back to the customs officer. She does not look thrilled to see you again. You had better answer her question.



CONTINUE

ELECTRONIC

ON TIME!

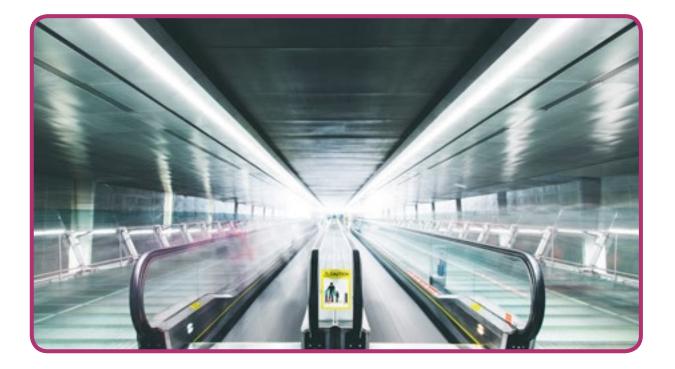
You exit customs into the arrivals lounge at Heathrow airport. You made it! It is 06:30 am exactly - you are on time! Many people are **gathered** waiting for their friends and loved ones. You spot someone holding a sign with your name on it.

He welcomes you to the UK, and introduces you to your new boss, Ms. Cartwright. She is very glad you are on time, and shakes your hand. Together, you leave the airport, and breathe the fresh air at last! You walk towards the company car with a new sense of purpose and confidence!



MOVING ON....

You feel good to have cleared immigration, but there is still work to be done. You still have to **reclaim** your bag and clear customs. You follow the other passengers down some stairs and then down a long corridor...



CONTINUE

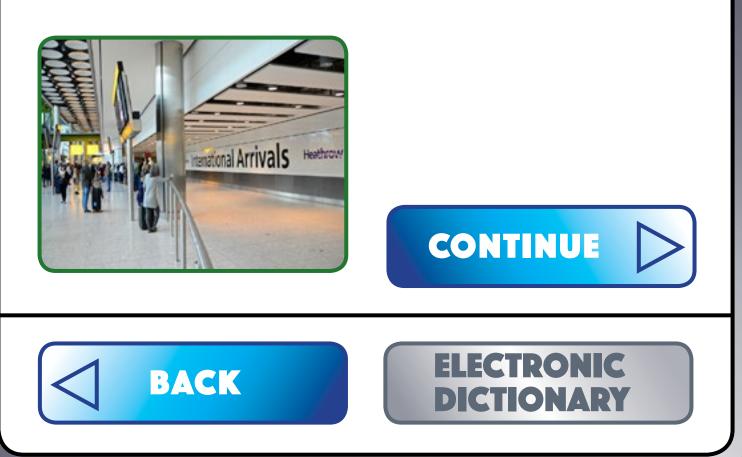
ELECTRONIC

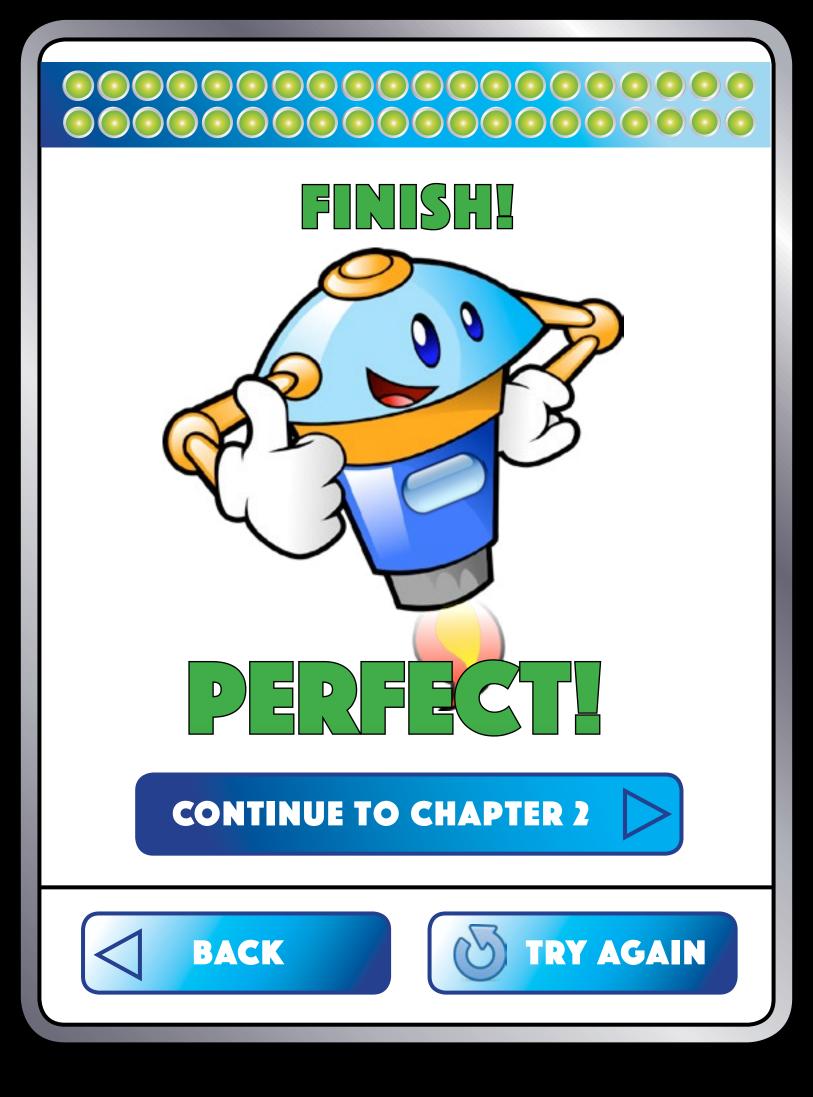
ICTIONARY

BAG INSPECTION

The customers officer opens your bag, and inspects the contents. There seems to be nothing suspicious in your bag, so she closes it up, and gives it back to you. She gives you an **encouraging** 'thumbs up', and wishes you a pleasant stay in the UK.

Taking your bags, you go through a door towards the arrivals lounge. Well done on clearing customs! You're almost at the finish line!





IMMIGRATION

You are in the main immigration hall. There are many people from all over the world, with passports of all different colours. There are also many ropes dividing the hall into separate lines. There are four **queues** ahead of you, each with a sign next to it. Which one will you join?





Slightly **embarrassed**, you go back to where you were to read the signs more carefully.



UK RESIDENTS

NO!

OKAY!

You line up for five minutes and finally get to a counter with a staff member.

HELLO. DO YOU HAVE A UK PASSPORT?

I SEE. I'M AFRAID YOU JOINED THE WRONG LINE. YOU NEED TO GO BACK AND JOIN THE LINE THAT SAYS 'FOREIGN PASSPORTS', OKAY?

Slightly **embarrassed**, you go back to where you were and read the signs more carefully.



THE RESTROOM

You line up and use the restroom. After a long flight, it feels good to relax!



You leave the restroom feeling refreshed and comfortable. Using the restroom seems to have focused your mind and give you **clarity**! Or, maybe it was because you used the time in the restroom to check the English in your dictionary! Either way, the choices in immigration seem easy now. You realise you need to join the line with the sign that says 'foreign passports'! You return to immigration.

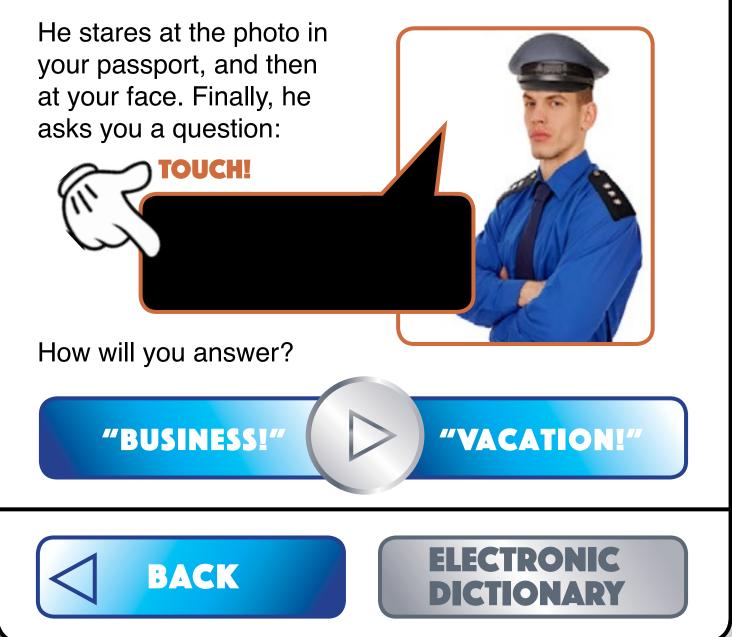
ELECTRONIC

ICTIONAR



FOREIGN PASSPORTS

You line up for five minutes and finally get to a counter with a staff member. The immigration officer looks like he is having a bad day, but you smile as you hand over your passport and landing card.



VISA

The imigration officer looks again at your landing card, and seems suspicious...



What will you do?

TOUCH!

SHOW YOUR DOCUMENTS





TOURISM

The immigration officer looks at your visa documents. It clearly states the purpose of your visit is business, not tourism. It's not a good idea to **lie** to immigration officers! He seems quite angry now.



Before you can explain, the officer speaks into his radio, and two security officers arrive at the counter. They ask you to come with them... you don't argue!



CREDIT CARD

You take out the Visa credit card from your wallet and give it to the officer.



You give the immigration officer all your paperwork, but he doesn't look happy. After he looks through all your documents, he finds your visa papers. You smile at him innocently.



SECURITY OFFICE

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CONTINUE

LECTRONIC

BUSINESS

The immigration officer looks at your visa documents. It clearly states the purpose of your visit is business, not tourism. He seems happy and gives you an encouraging 'thumbs up'!







MORE QUESTIONS

The immigration officer is looking serious again. You prepare yourself for his next question. Listen carefully!

How will you answer?

TOUCH!





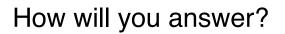




FINAL OUESTION

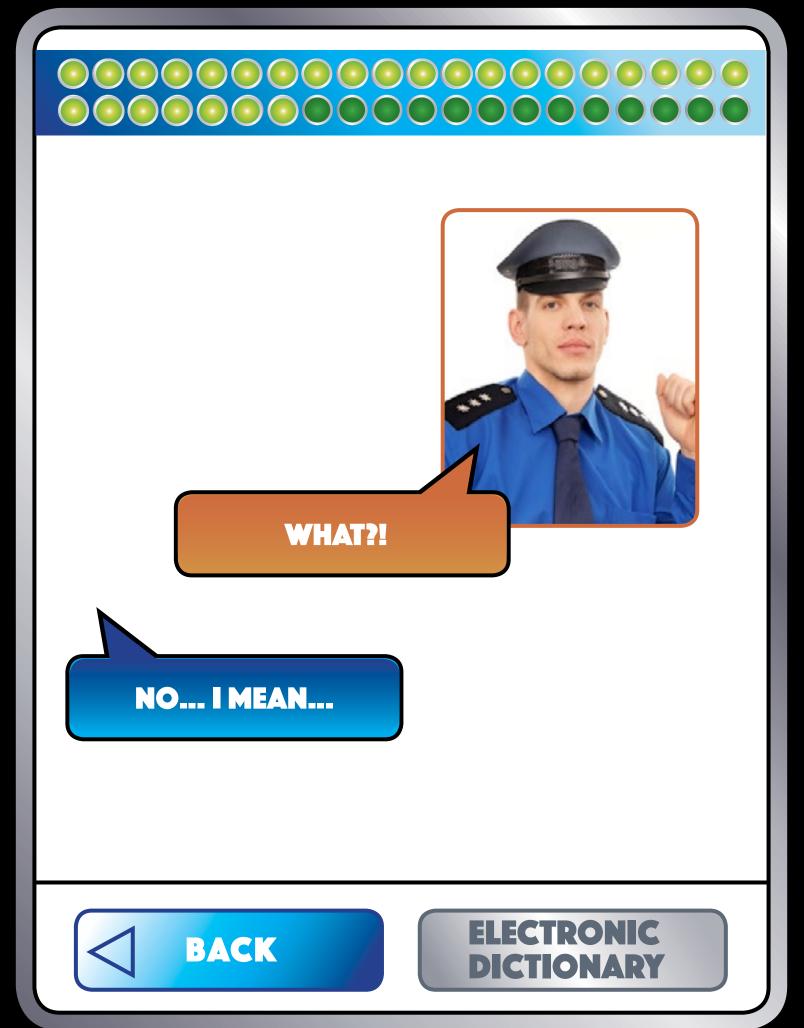
The immigration officer nods at you seriously. He looks like he has one more question to ask you.

TOUCH!



CONTINUE







SECURITY OFFICE

You're fast, but not fast enough! You are caught by two immigration officers and taken to a private room in the security department. It's scary! After waiting for a long time, a security officer arrives and asks you many questions about your trip. You apologize, and explain that you **panicked**. Finally the security officer agrees to let you continue with the immigration process.

You are escorted back to the immigration counter. The immigration officer does not look **thrilled** to see you again. You had better answer his questions truthfully!



CONTINUE

SECURITY OFFICE

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CONTINUE

LECTRONIC

ВАСК

IMMIGRATION CLEARED!

The immigration officer stares at you for a moment. Then he stamps your passport and hands it back to you. He smiles and tells you to have a pleasant stay in the UK. Well done on making it through immigration!



CONTINUE





BAGGAGE COMPLAINT

You arrive at a counter. There are not many people around, and you can not see any baggage. The clerk behind the counter greets you with a smile.



HELLO. DO YOU HAVE A PROBLEM WITH YOUR BAGGAGE?

NO. I JUST WANT TO COLLECT MY BAG.

I SEE. THANK YOU!

OH, THEN YOU NEED BAGGAGE CLAIM. IT'S BACK DOWN THE HALL.

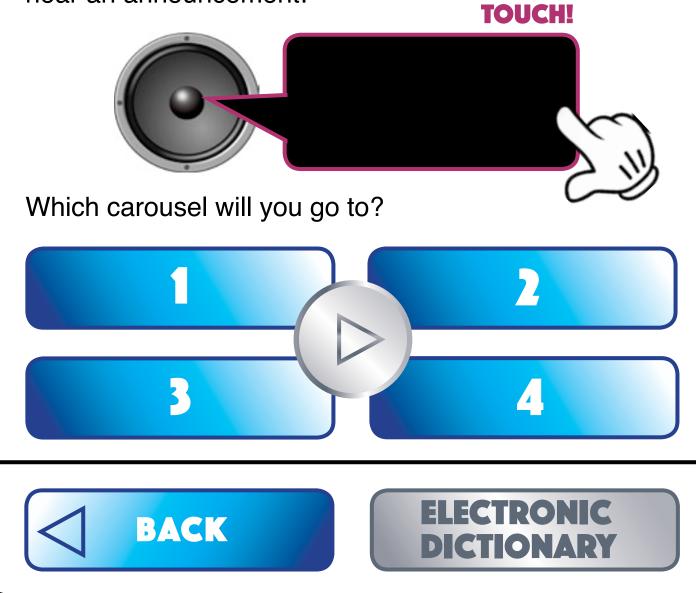
Slightly **embarrassed**, you walk back down the hall and take the corridor towards baggage claim.



BAGGAGE CLAIM

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The electronic information board says baggage from this flight will arrive at carousel 2. On your way there, you hear an announcement:



WAITING....

BACK

You wait for a long time at the carousel, but no baggage arrives. There are also no other passengers around. Perhaps you had better make another choice.



ELECTRONIC

DICTIONARY

A FORK IN THE ROAD....

You arrive at a **fork** in the corridor. To the left, the sign points to 'baggage claim'. To the right, the sign points to 'baggage complaint'. Which way will you choose?



BAGGAGE CLAIM



ELECTRONIC

DICTIONARY

CAROUSEL 4

You trust the announcement and go to carousel 4. Luckily, your suitcase is one of the first onto the **conveyor**! You grab it, and make your way to the final area. You've almost left the airport, there is only one last place to visit!



CONTINUE

ELECTRONIC

DICTIONARY



CUSTOMS

You drag your suitcase to the customs area. You don't have any taxable or duty free items in your baggage, so you hope it goes smoothly. You did buy a lot of allergy medicine before you left, but you don't have to declare that!

You are stopped by a customs officer. She checks your passport and customs declaration card. She looks like she is going to ask you some questions...



CONTINUE

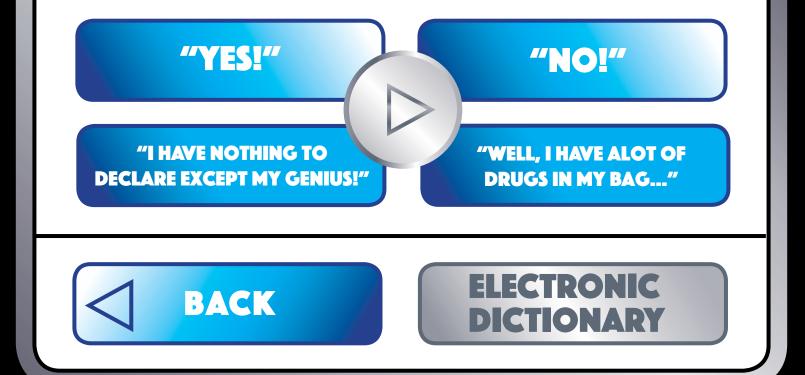
LECTRONIC

MORE QUESTIONS!

You listen carefully to the custom officer's question:

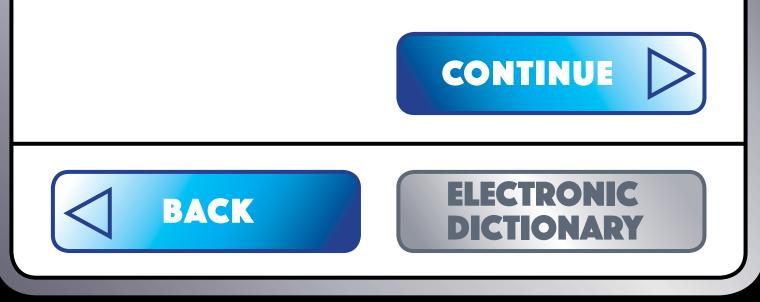
TOUCH!

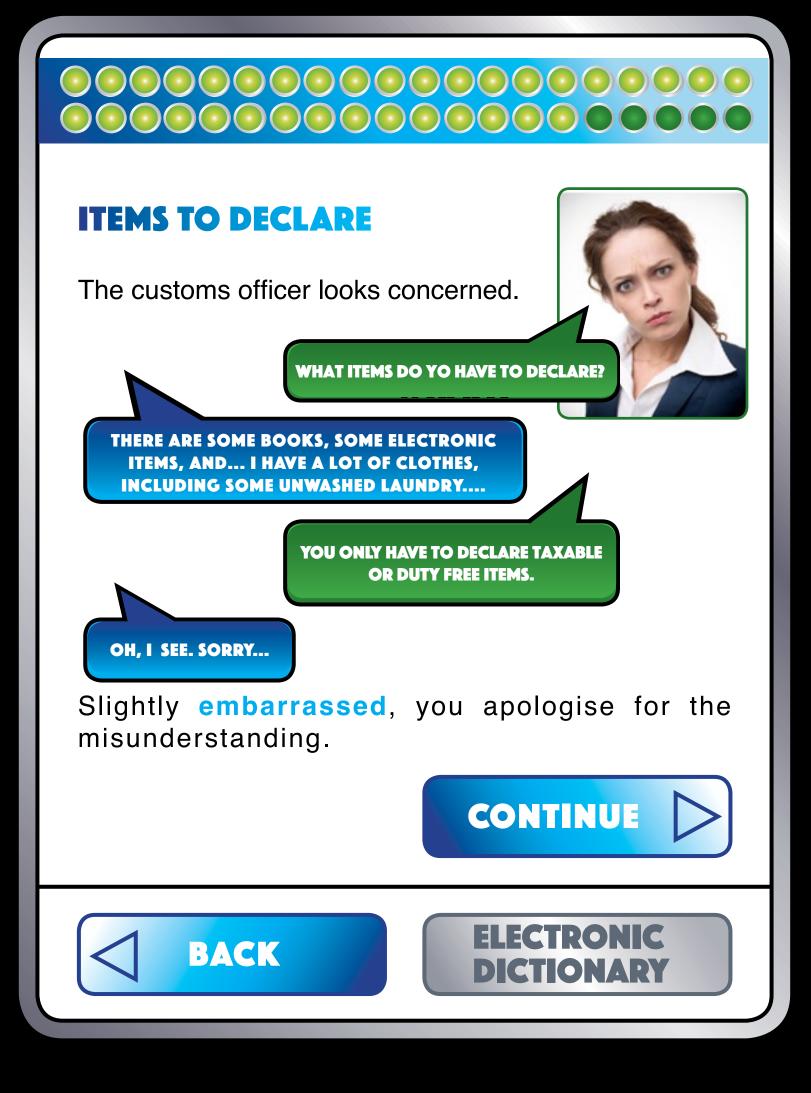


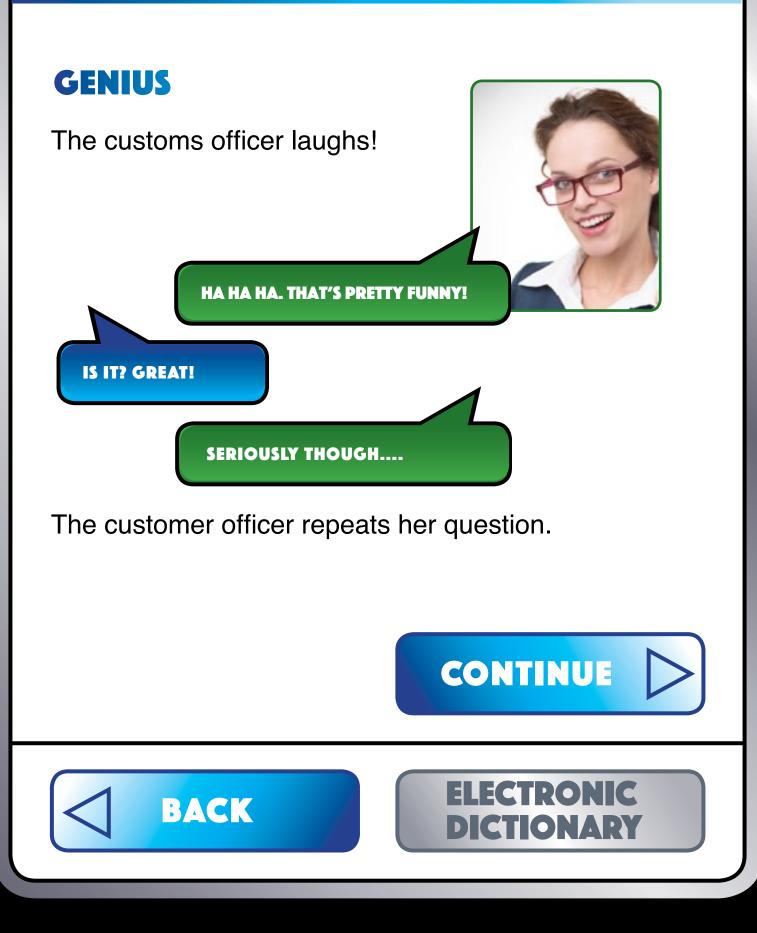




probably shouldn't refer to medicine as 'drugs', as it has other meanings here. Slightly **embarrassed**, you apologise for the misunderstanding.







NOTHING TO DECLARE

The customs officer looks happy that your answer matches the one on your **declaration card**! Phew!





BACK

ELECTRONIC DICTIONARY

FINAL QUESTION!

You listen carefully to the custom officers question:

TOUCH!

How will you answer?



SECURITY OFFICE

You're fast, but not fast enough! You are caught by two customs officers and taken to a private room in the security department. It's scary! After waiting for a long time, a security officer arrives and asks you many questions about your trip. You apologize, and explain that you **panicked**. Finally the security officer agrees to let you continue with the customs inspection.

You are escorted back to the customs counter. The customs officer does not look thrilled to see you again. You had better agree to let her inspect your bag.



CONTINUE

ELECTRONIC

DICTIONARY

A FEW MINUTES LATE...

You exit customs into the arrivals lounge at Heathrow airport. You made it! It is 06:45 am - you are only 15 minutes late! Many people are **gathered** waiting for their friends and loved ones. You spot someone holding a sign with your name on it.

He welcomes you to the UK, and takes you to meet your new boss, Ms. Cartwright. She is fast asleep in her chair in the waiting area. You shake her awake, and she looks a little **annoyed**, but eventually smiles and shakes your hand. Together, you leave the airport, and breathe the fresh air at last! You walk towards the company car hoping to have future opportunities to impress your new boss.



ELECTRON

DICTIONAR

MOVING ON....

You feel good to have cleared immigration, but there is still work to be done. You still have to **reclaim** your bag and clear customs. You follow the other passengers down some stairs and then down a long corridor...



CONTINUE

ELECTRONIC

DICTIONARY

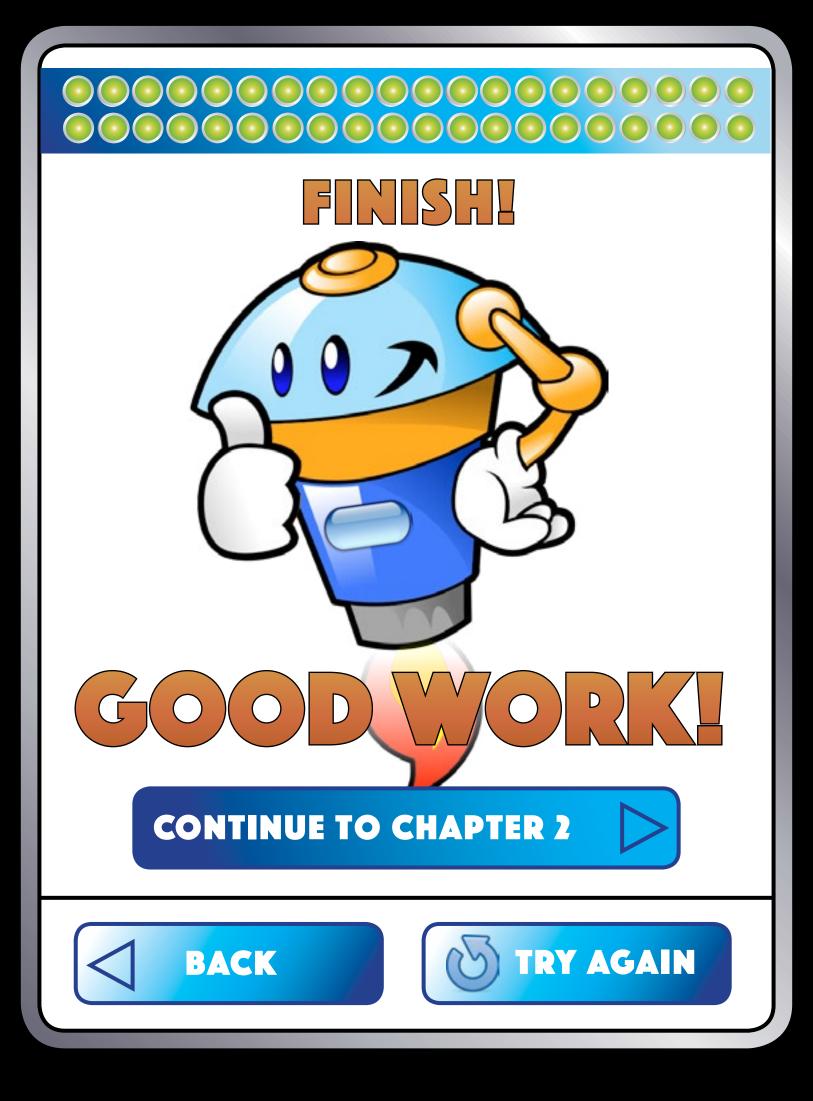


BAG INSPECTION

The customers officer opens your bag, and inspects the contents. There seems to be nothing suspicious in your bag, so she closes it up, and gives it back to you. She gives you an **encouraging** thumbs up, and wishes you a pleasant stay in the UK.

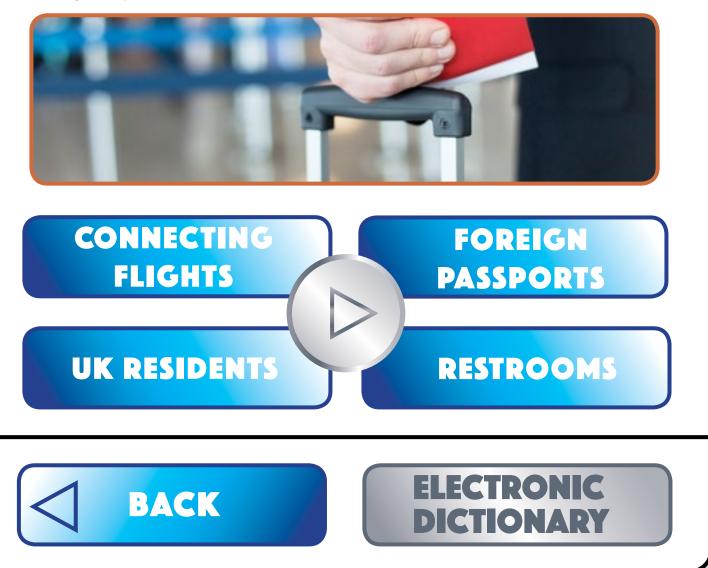
Taking your bags, you go through a door towards the arrivals lounge. Well done on clearing customs! You're almost at the finish line!





IMMIGRATION

You are in the main immigration hall. There are many people from all over the world, with passports of all different colours. There are also many ropes dividing the hall into separate lines. There are four **queues** ahead of you, each with a sign next to it. Which one will you join?





Slightly **embarrassed**, you go back to where you were to read the signs more carefully.



UK RESIDENTS

NO!

OKAY!

You line up for five minutes and finally get to a counter with a staff member.

HELLO. DO YOU HAVE A UK PASSPORT?

I SEE. I'M AFRAID YOU JOINED THE WRONG LINE. YOU NEED TO GO BACK AND JOIN THE LINE THAT SAYS 'FOREIGN PASSPORTS', OKAY?

Slightly **embarrassed**, you go back to where you were and read the signs more carefully.



THE RESTROOM

You line up and use the restroom. After a long flight, it feels good to relax!



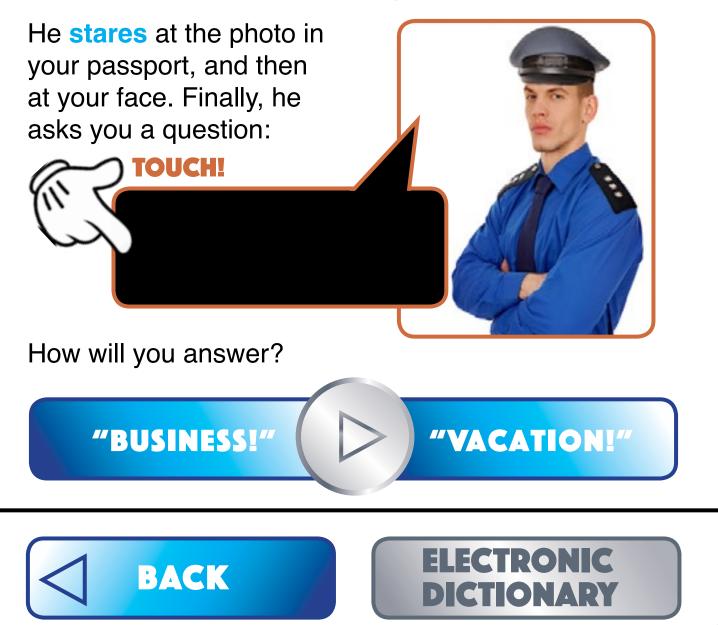
You leave the restroom feeling refreshed and comfortable. Using the restroom seems to have focused your mind and give you **clarity**! Or, maybe it was because you used the time in the restroom to check the English in your dictionary! Either way, the choices in immigration seem easy now. You realise you need to join the line with the sign that says 'foreign passports'! You return to immigration.



ELECTRONIC DICTIONARY

FOREIGN PASSPORTS

You line up for five minutes and finally get to a counter with a staff member. The immigration officer looks like he is having a bad day, but you smile as you hand over your passport and landing card.



VISA

The imigration officer looks again at your landing card, and seems suspicious...

TOUCH!

What will you do?

SHOW YOUR DOCUMENTS





TOURISM

The immigration officer looks at your visa documents. It clearly states the purpose of your visit is business, not tourism. It's not a good idea to **lie** to immigration officers! He seems quite angry now.



Before you can explain, the officer speaks into his radio, and two security officers arrive at the counter. They ask you to come with them... you don't argue!



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CONTINUE

ELECTRONIC

BUSINESS

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MORE QUESTIONS

The immigration officer is looking serious again. You prepare yourself for his next question. Listen carefully!



How will you answer?









FINAL OUESTION

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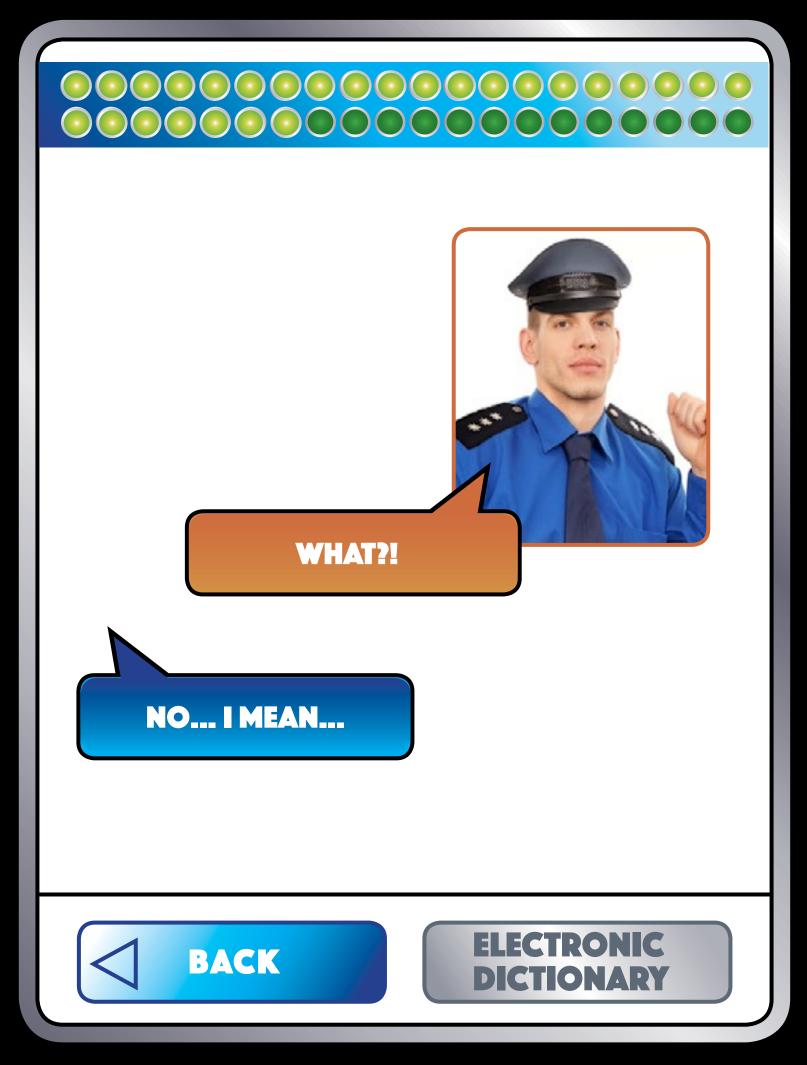
TOUCH!



How will you answer?

CONTINUE







SECURITY OFFICE

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CONTINUE

LECTRONIC

ВАСК

IMMIGRATION CLEARED!

The immigration officer stares at you for a moment. Then he stamps your passport and hands it back to you. He smiles and tells you to have a pleasant stay in the UK. Well done on making it through immigration!



CONTINUE

ELECTRONIC

ICTIONARY



BAGGAGE COMPLAINT

You arrive at a counter. There are not many people around, and you can not see any baggage. The clerk behind the counter greets you with a smile.



HELLO. DO YOU HAVE A PROBLEM WITH YOUR BAGGAGE?

NO. I JUST WANT TO COLLECT MY BAG.

OH, THEN YOU NEED BAGGAGE CLAIM. IT'S BACK DOWN THE HALL.

I SEE. THANK YOU!

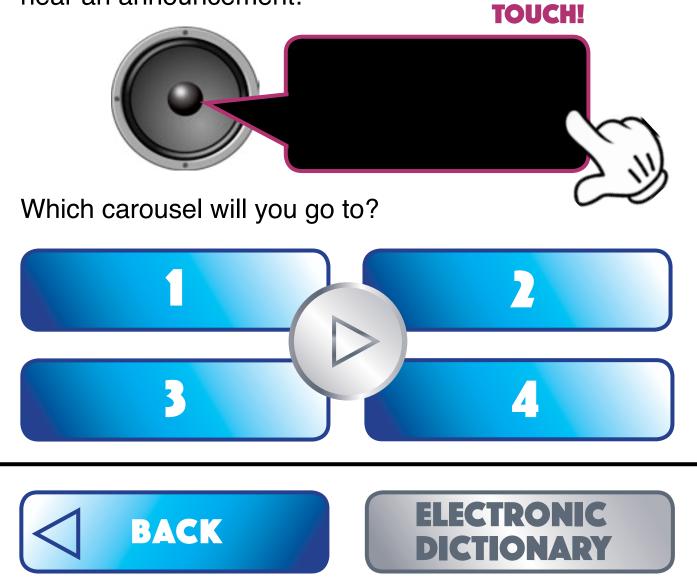
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WAITING....

BACK

You wait for a long time at the carousel, but no baggage arrives. There are also no other passengers around. Perhaps you had better make another choice...



ELECTRONIC

DICTIONARY

A FORK IN THE ROAD....

You arrive at a **fork** in the corridor. To the left, the sign points to 'baggage claim'. To the right, the sign points to 'baggage complaint'. Which way will you choose?



BAGGAGE CLAIM



ELECTRONIC

DICTIONARY

CAROUSEL 4

You trust the announcement and go to carousel 4. Luckily, your suitcase is one of the first onto the **conveyor**! You grab it, and make your way to the final area. You've almost left the airport, there is only one last place to visit!



CONTINUE

ELECTRONIC

DICTIONARY



CUSTOMS

You drag your suitcase to the customs area. You don't have any taxable or duty free items in your baggage, so you hope it goes smoothly. You did buy a lot of allergy medicine before you left, but you don't have to declare that!

You are stopped by a customs officer. She checks your passport and customs declaration card. She looks like she is going to ask you some questions...



CONTINUE

LECTRONIC

MORE QUESTIONS!

You listen carefully to the custom officer's question:

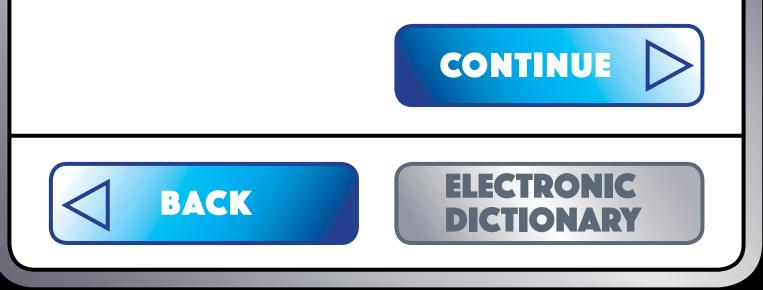
TOUCH!



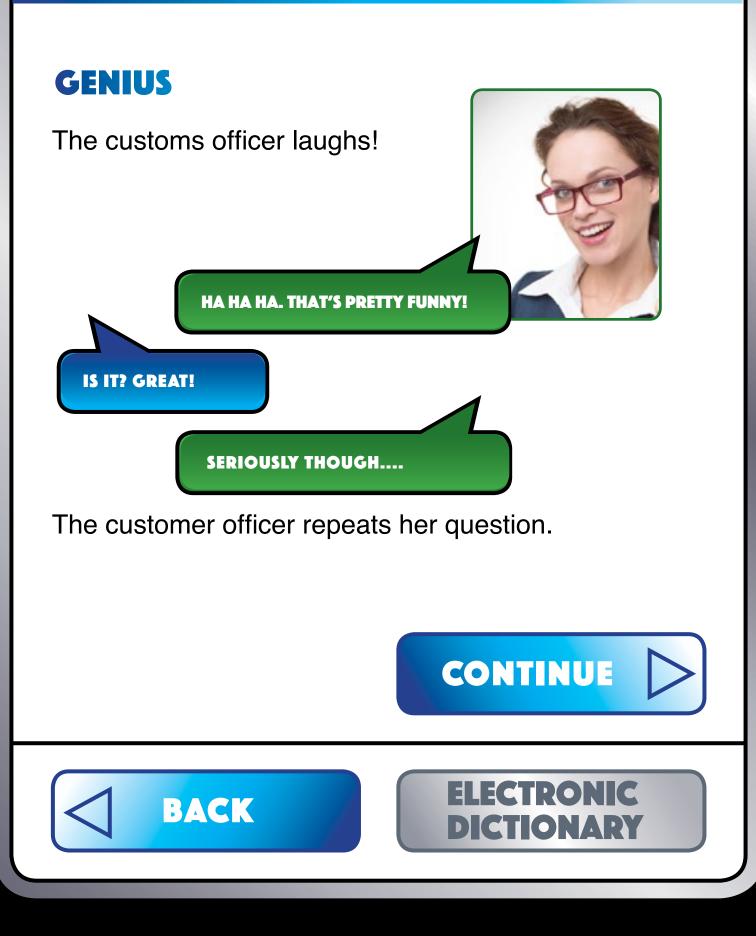




The customs officer explains that while in the UK, you probably shouldn't refer to medicine as 'drugs', as it has other meanings here. Slightly embarrassed, you apologise for the misunderstanding.







NOTHING TO DECLARE

The customs officer looks happy that your answer matches the one on your **declaration card**! Phew!



CONTINUE

ELECTRONIC

DICTIONARY

FINAL QUESTION!

You listen carefully to the custom officers question:

How will you answer?

TOUCH!

"PLEASE, GO AHEAD!"







SECURITY OFFICE

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You are escorted back to the customs counter. The customs officer does not look thrilled to see you again. You had better agree to let her inspect your bag.



CONTINUE

ELECTRONIC

DICTIONARY

YOU'RE LATE!

You exit customs into the arrivals lounge at Heathrow airport. You made it! It is 07:00 am however - you are half an hour behind schedule! Many people are **gathered** waiting for their friends and loved ones. You spot someone holding a sign with your name on it.

He welcomes you to the UK, and apologizes that your new boss, Ms. Cartwright, could not be here to greet you. She had to get back to the office to attend an important meeting. Together, you leave the airport, and breathe the fresh air at last! You walk towards the company car, and make a promise to yourself to study harder and impress your boss when you finally meet her.



ELECTRON

D) (et lon A r)

MOVING ON....

You feel good to have cleared immigration, but there is still work to be done. You still have to **reclaim** your bag and clear customs. You follow the other passengers down some stairs and then down a long corridor...



CONTINUE

ELECTRONIC

DICTIONARY

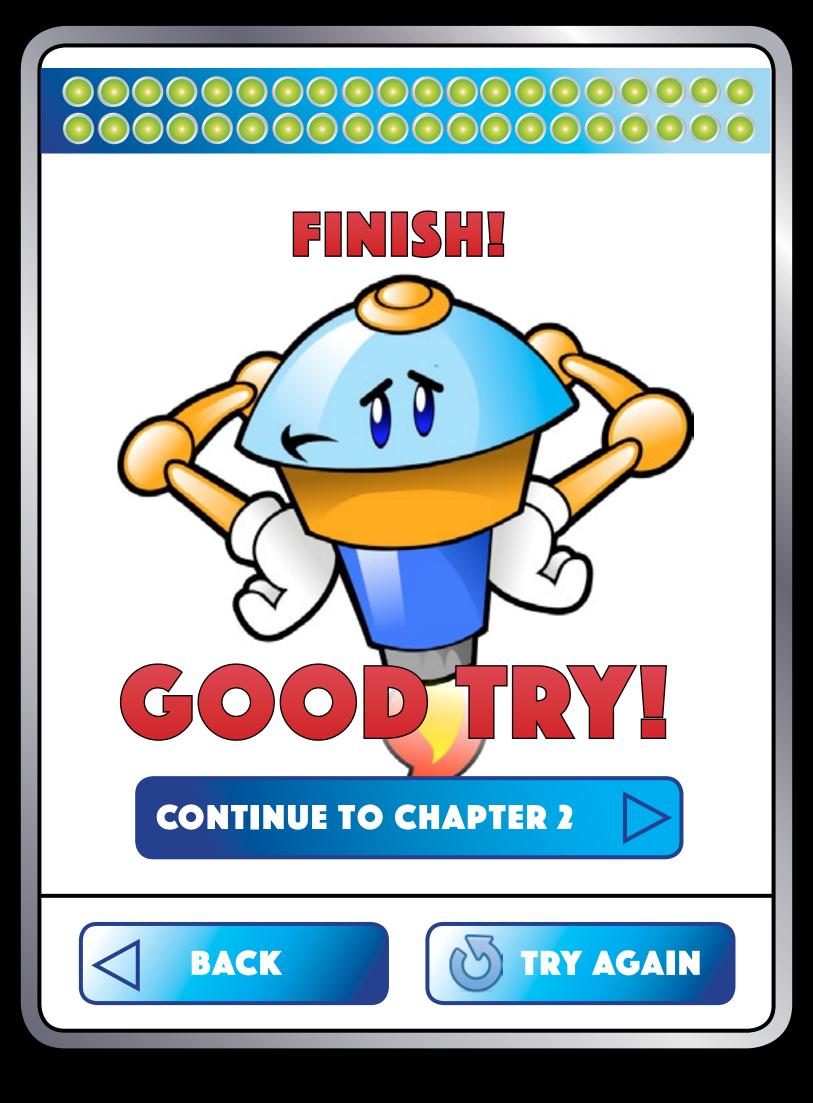


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Taking your bags, you go through a door towards the arrivals lounge. Well done on clearing customs! You're almost at the finish line!





anxious

(adj.) worried, concerned

EX: Ted is feeling anxious about his presentation tomorrow.

potential

(n.) possiblity, ability not yet attained

EX: Ted has the potential to be a great doctor, but at the moment, he's still too inexperienced.



first impression

(n.) the feeling someone has when seeing or meeting another for the first time.

immigration

(n.) the area in an airport that checks travel permission, passports, and visas.

baggage claim

(n.) the area in an airport where passengers collect their bags after their flight.

customs

(n.) the area in an airport where passengers bags are inspected for taxable items. inspected for tax a



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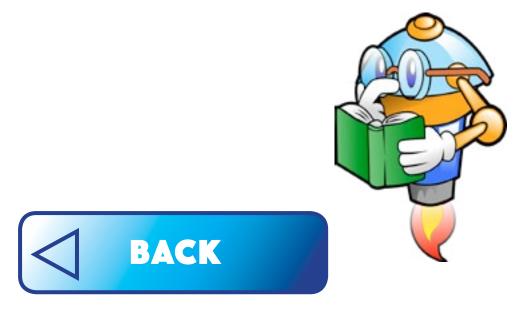
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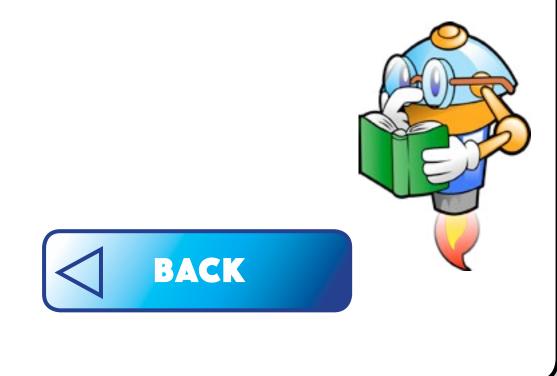
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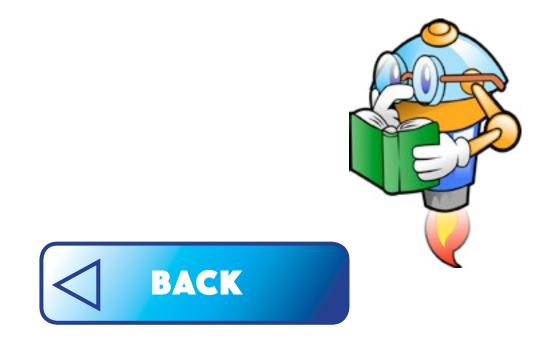


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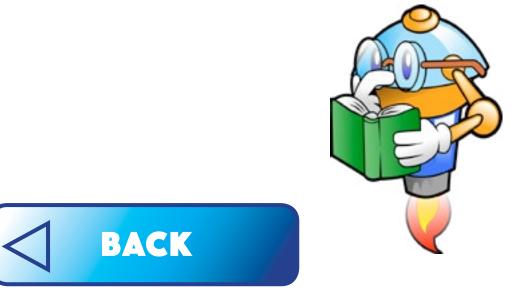
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disembark

(v.) leave, get off, get out of eg. a plane, train etc.

EX: Ted will disembark the boat at 3pm.

glow

(n.) a warm light, brightness

EX: Ted has a 'glow in the dark' watch.





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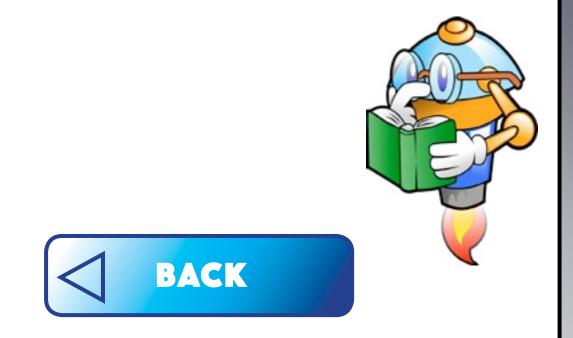




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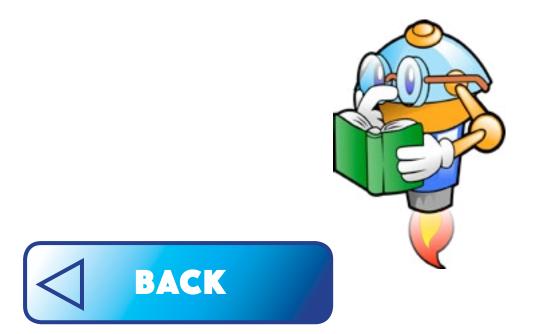
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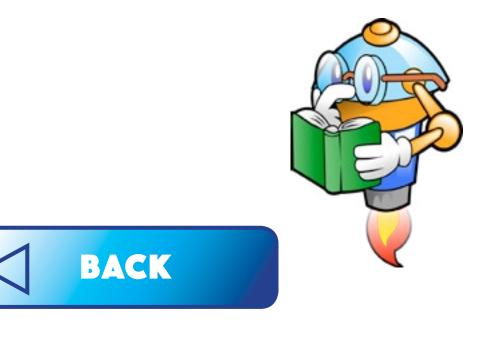
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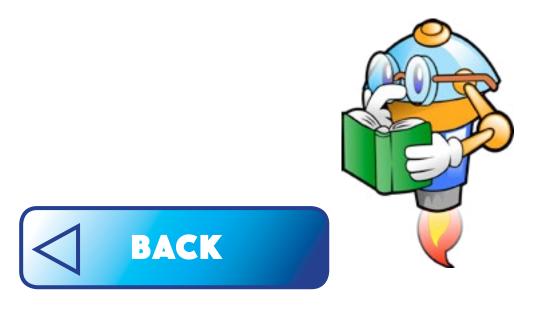
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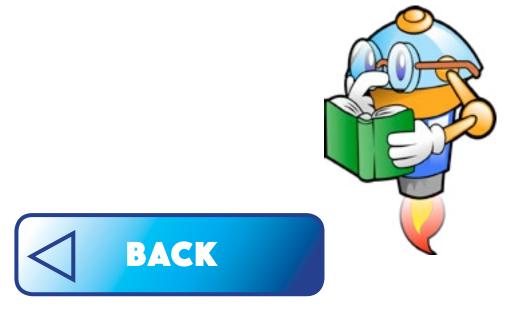
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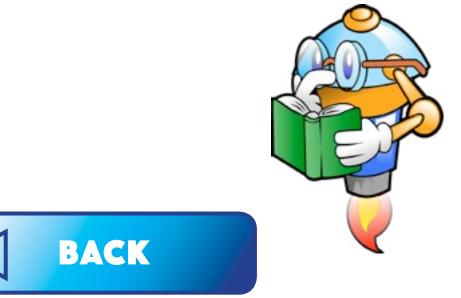
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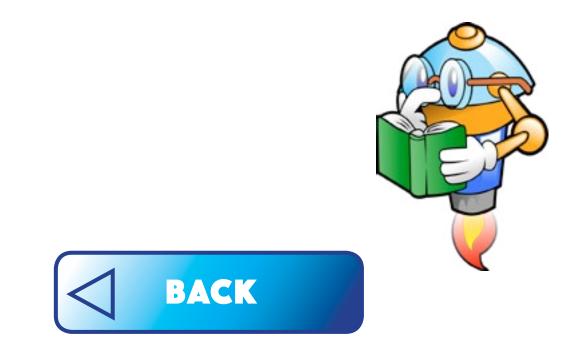
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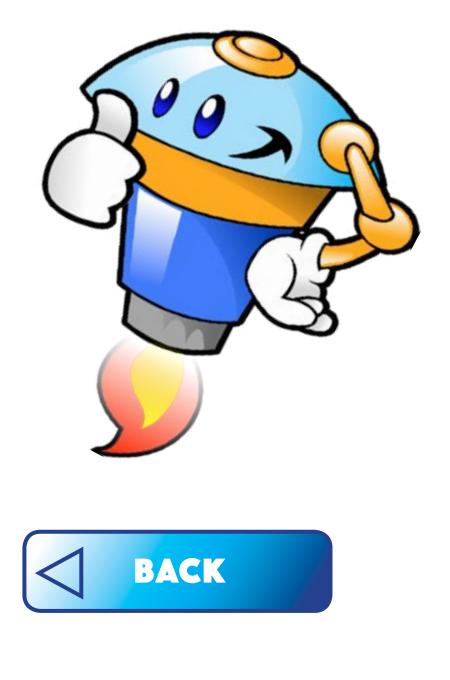






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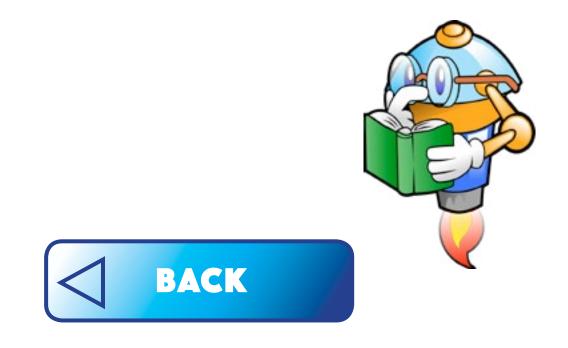
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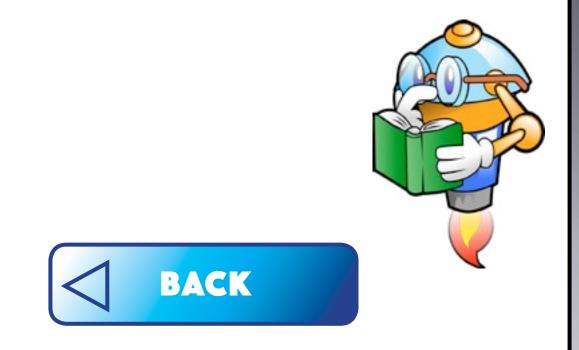
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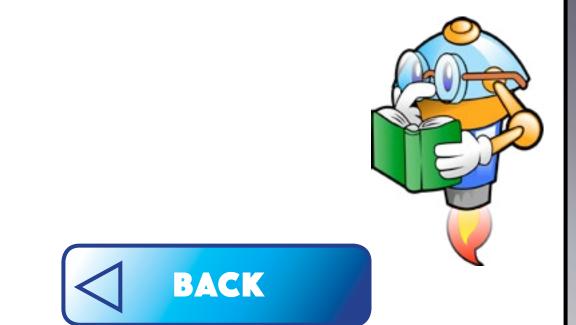
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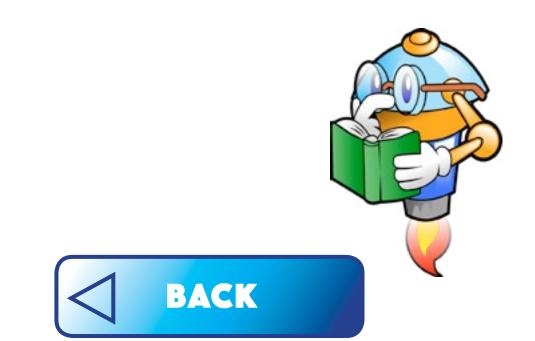
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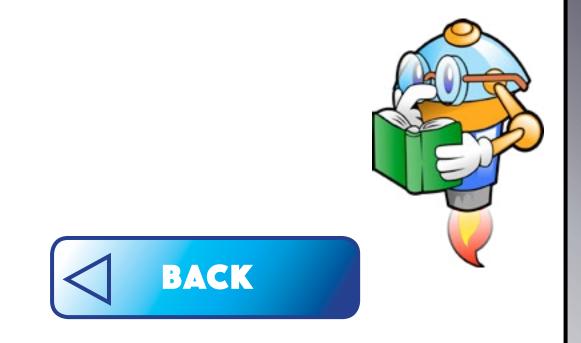




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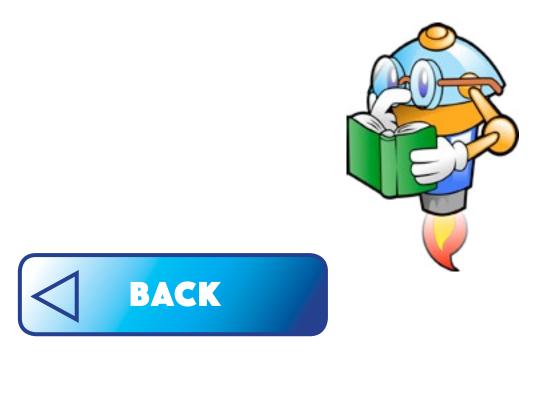
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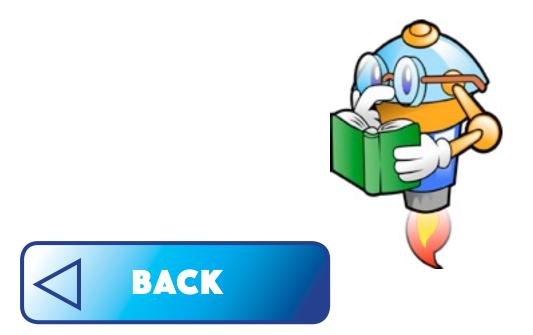
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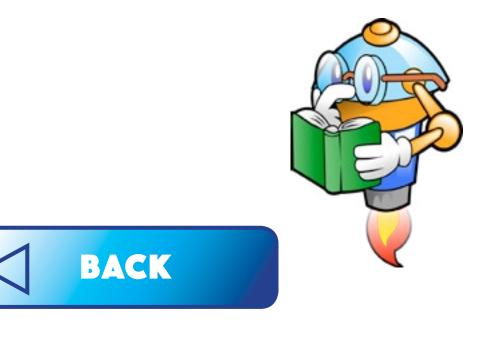
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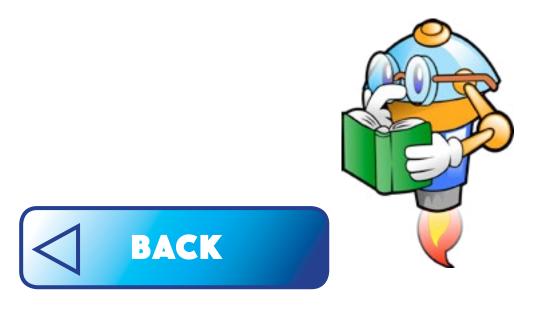
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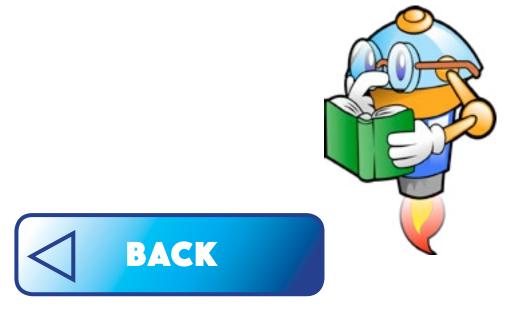
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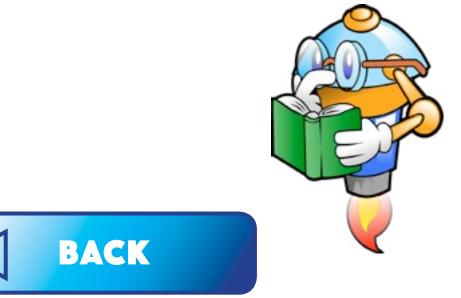
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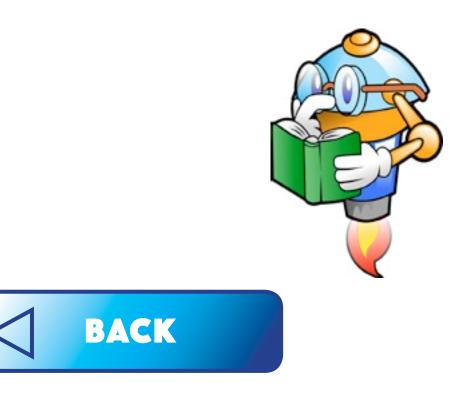
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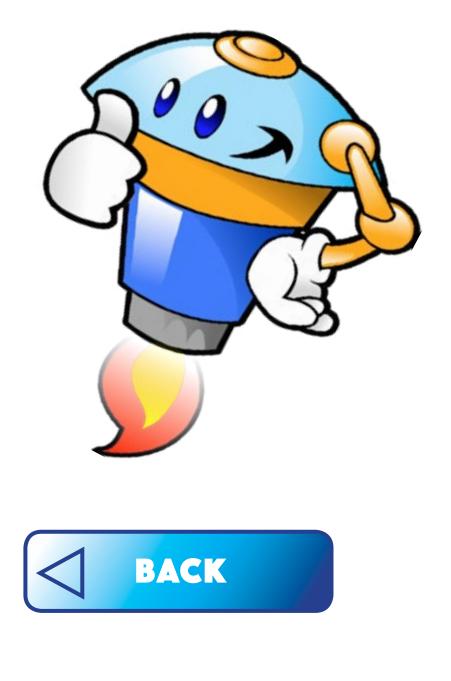






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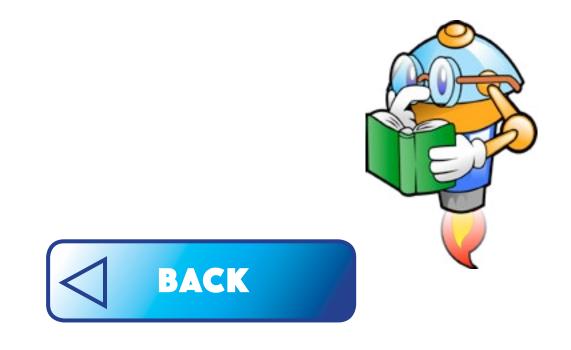
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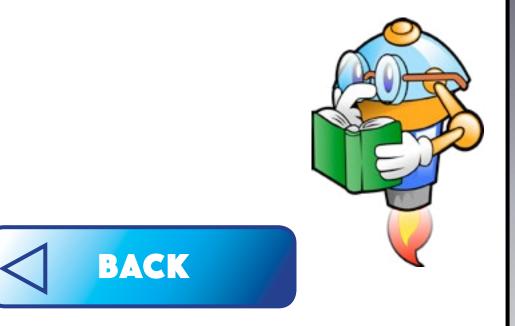
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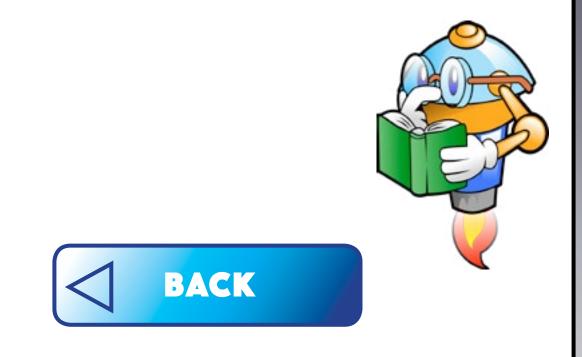
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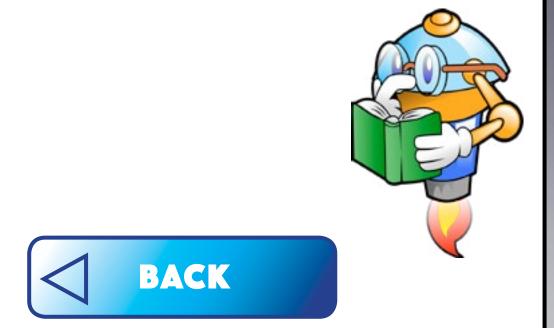
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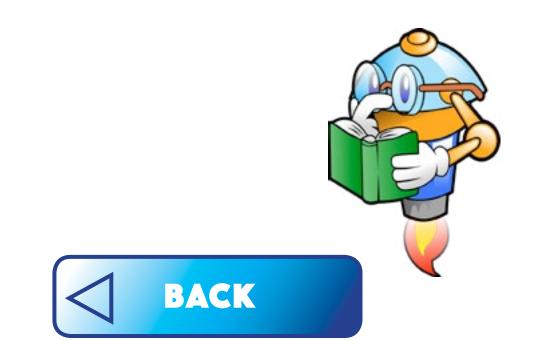
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landing card

(n.) a document usually provided to passengers during an international flight, to prepare for the immigration / passport control area in the airport.





suspicious

(adj.) believing something is wrong, not trusting something

EX: The shop clerk told Ted that his sandwich was fresh, but he was suspicious because the bread was green.



tourism

(n.) the act of visiting another place for sightseeing.

EX: Ted was going to Spain for tourism, not business.

lie

(v.) giving false information, not telling the truth

EX: Ted lied about his age. He is 38, not 21.

argue

(v.) debate, disagree, challenge

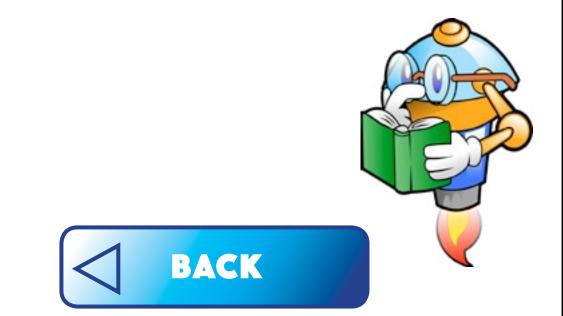
EX: Ted argued with his wife every day about everything.



innocently

(adv.) purely, with no bad intent

EX: Ted ate the icecream in the fridge innocently, without realising it wasn't his.

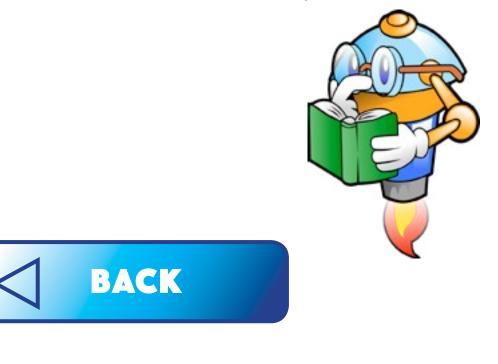


misunderstanding (n.) mistake in communication

EX: There was a misunderstanding between Ted and Bob. Ted thought Bob had given him money as a gift, but Bob thad only lent Ted money, and wanted it back.

thrilled (adj.) happy, excited

EX: Ted was thrilled when he won the lottery.



encouraging

(adj.) motivating, positive

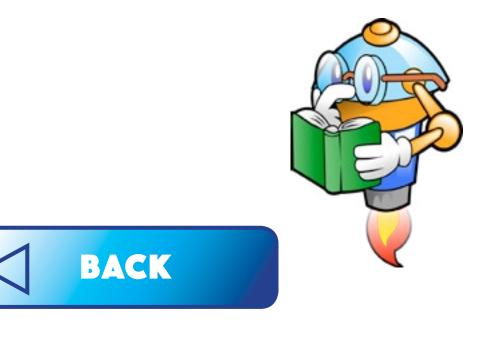
EX: Ted's medical results were encouraging, as they had improved since last year.



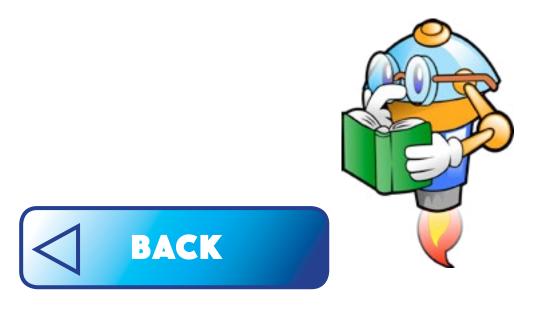
- will + VERB+ing
- EX: I will be working tomorrow.
- EX: Jim will be flying to Paris next week.
- EX: They will be asking you lots of questions.
- EX: I won't be playing tennis this afternoon.
- EX: Will you be dancing tomorrow night?



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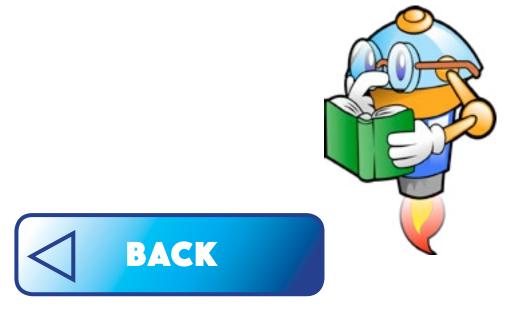
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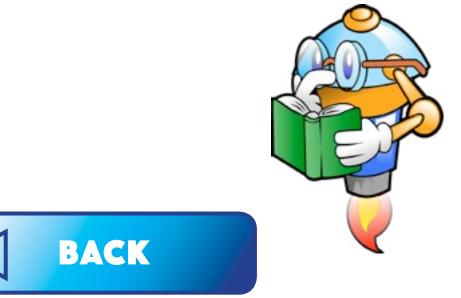
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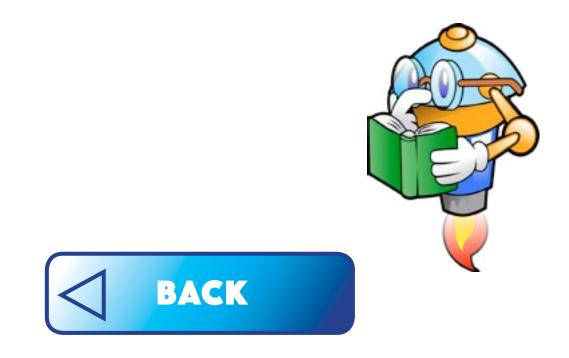
panic

(v.) act irrationally, act impulsively due to fear

EX: Ted panicked whe he saw a spider.

thrilled (adj.) happy, excited

EX: Ted was thrilled when he won the lottery.



panic

(v.) act irrationally, act impulsively due to fear

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thrilled (adj.) happy, excited

EX: Ted was thrilled when he won the lottery.



stare (v.) look at somethig intensely

EX: Ted stared at the cakes in the bakery window.





embarrassed

(adj.) shamed, mildly humiliated, red-faced

EX: Ted felt embarrassed because he answered the question wrong in front of the whole class.



conveyer (belt) (n.) a moving platform for transporting objects

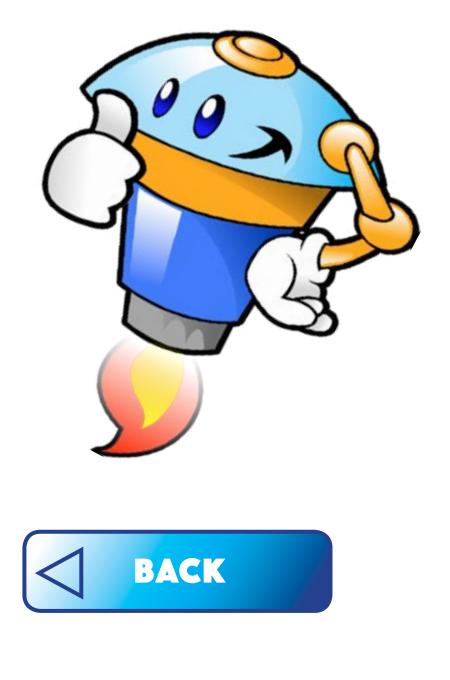






HINT:

Press the speech bubble to hear the announcement!



fork

(n.) a split in a road or path, where one path divides into two or more paths

EX: Ted encountered a fork in the road, and did not know if he should turn left or right.



conveyer (belt)

(n.) a moving platform for transporting objects





declaration card

(n.) a document usually provided to passengers during an international flight, to prepare for the customs area in the airport.



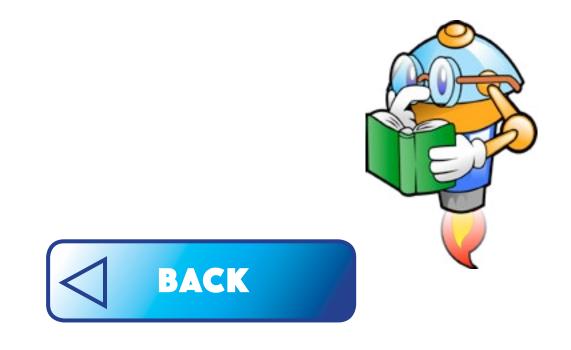


genius

- (n.) an extreme or intense cleverness
- EX: Ted's genius for doing maths was impressive.

drugs

- 1.(n.) medicine e.g. ibuprofen, paracetemol
- 2.(n.) illegal intoxicating substances e.g. cocaine, heroin



embarrassed

(adj.) shamed, mildly humiliated, red-faced

EX: Ted felt embarrassed because he answered the question wrong in front of the whole class.



embarrassed

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"I have nothing to declare except my genius." - Oscar Wilde

Customs Control, New York, 1882.



declaration card

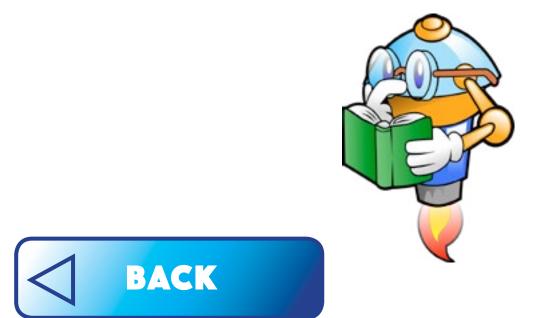
(n.) a document usually provided to passengers during an international flight, to prepare for the customs area in the airport.



inspect

(v.) look, investigate

EX: I would like to inspect the office before I leave.



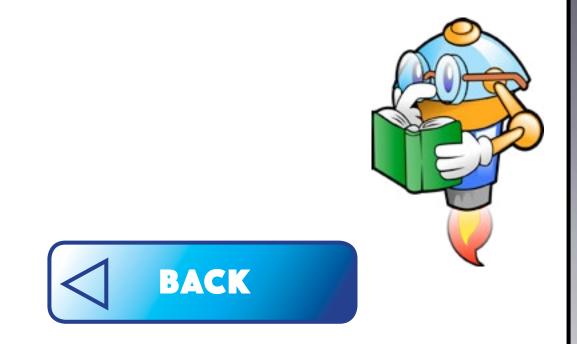
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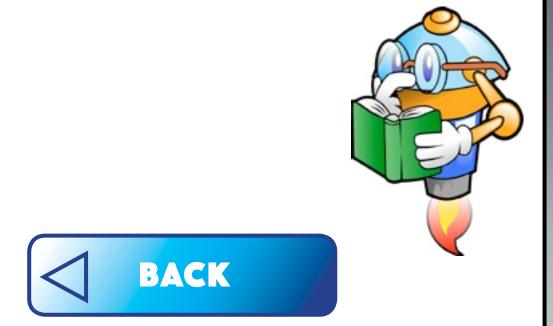
EX: Ted was thrilled when he won the lottery.



gather

(v.) group or come together, congregate

EX: Ted gathered his friends for a party



reclaim

(v.) take back, repossess

EX: Ted reclaimed his chair after Bob had stolen it.



encouraging

(adj.) motivating, positive

EX: Ted's medical results were encouraging, as they had improved since last year.



THANKS FOR PLAYING!

PLEASE RETURN THE I-PAD TO THE TEST ADMINISTRATOR