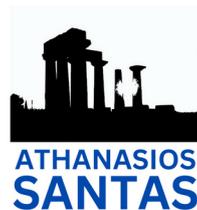TREASURE
HUNT
IN YOUR
NEIGHBOUR'S
BACKYARD

finding new ways for
European agritourism

PR5
English for agritourism self-study guide
AI-enhanced

Photeinos Santas
Thanos Santas

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Athens, July 2024

In memory of

Thanos Sr., Eleni, Maro, Regas

Your love and affection will always motivate us.

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the European Union

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PART I – GENERAL

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Introduction

The field of English language learning is at the forefront of the Artificial Intelligence (AI) revolution that is currently in full swing. Machine Learning algorithms have been used to train machines with huge amounts of data. Every month new applications are introduced, and what used to be cutting edge a few months ago has been replaced by a new version or superseded by new products. Or something that was free a few months ago, it is now behind paywalls.

Planned or scheduled obsolescence goes rampant in the big businesses. New videos about the impact of AI tools on traditional language learning are uploaded to YouTube at a frequency which is hard to keep up with. As a result, fierce competition is actively occurring between tech companies for market share, and there are very few resources that have not been monetized yet. In almost all cases, this monetization takes the form of *fremium* (free-to-try, pay-to-use).

We did a thorough market survey to identify open source and free language learning applications or educational software we could use in the Self-paced English Learning Tool. The survey found that there are many English language learning applications using the latest AI technologies. Technology giants, such as Google, Amazon and Microsoft have taken leading positions in this market, launching applications using neuronal networks, Machine Learning and Big Data. These applications have reached a commercial maturity with fees ranging from 0 USD/month at the entry level, with limited functionality or number of input characters for testing, all the way up to hundreds of USD per month for hundreds of customization parameters, such as voices, speed of reading, voice pitch, tens of languages and users.

The AI text-to-speech and speech-to-text or transcription applications have a central role within this market. These applications are especially useful and offer valuable support for individuals with visual impairment, dyslexia, ADHD or any other type of specific learning disability (SLD), defined as imperfect skills in listening, speaking, reading, writing and spelling.

Most of the latest developments in the AI language learning field occurred within the last few months and they were introduced after the Transnational Project Meeting in Matera, Italy on 19-20 September 2023, where we presented a first draft of the self-paced English training tool. As a result of this explosive growth of AI tools, the TreasureHunt project consortium of partners decided to proceed to a slight modification of the learning plan outlined in the approved project proposal.

The modified approach combines the mainstream Computer Based Training (CBT) methods, included in the approved proposal, with content contribution from the latest AI tools. The mainstream methods offer better control over learner assessment by means of closed type questions (multiple choice, true/false, match type, fill-in the blanks, etc). However, AI tools for English language learning, such as chatbots, can hold decent online conversations and are getting better every day. The AI tools provide voice-synthesized audio, and thus can improve listening skills

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by exposing learners to multiple English accents, pronunciations, speaking speeds, intonation patterns and content variety.

On the downside, AI English conversation tools are only available as mobile apps and on their paid versions[1]; they might not be available to all countries yet, and they are available only when there is an Internet connection. Recently, however, the tide is turning and there have been dramatic changes in ChatGPT, the leading Large Language Model (LLM) AI tool. As of 22 November 2023, voice control capabilities, available only to paid subscribers back in September 2023, were made available to all users of the tool.[2]

These changes have led to the decision to upgrade the self-paced tool with LLM tools, such as ChatGPT, Bing, Bard, etc. and solve the problem of limited teacher-learner interaction or lack of communication partners for practicing. Consequently, the AI tools added to the training content bring the TreasureHunt project at the forefront of technology and certainly generate great future possibilities.

Too much AI, however, is no good. A few years ago, the Greek Ministry of Employment made the mistake to trust Machine Translation without proper human supervision. The 193 million EUR scandal[3] that shook the entire Greek government, was discovered accidentally by a few English words transliterated to Greek by machine translation, and resulted in a major blow to remote learning and vocational training through private vocational training institutions (KEK) of questionable quality and integrity maintaining clandestine connections with higher government officials, and led to the resignation of the Minister of Employment.

Recently it was discovered that language learning and memorization can be improved by using traditional tools & methods, such as paper and pencil, to write down information. It seems that the movement of pencil on paper helps creating new paths and associations among neurons that help store more information. Proponents of the new view point out that AI triggers the brain to act in a use-it-or-lose it way, and may become lazy in memorizing information. For example, the launching of smartphones capable of storing hundreds of telephone numbers in memory removed the need to remember telephone numbers; habits and tools such as keeping handwritten telephone directories, rotary telephone card holders or Marbig telephone list finders have become obsolete. As a result, today nobody remembers more than 2-3 telephone numbers, compared to tens of numbers before the new technology.

The take-home lesson about AI is

do not trust the machine, and always check answers[4]

This is a standard warning that every AI or "bot" has on its main page.

Needs analysis

The conducted needs analysis was based on the following requirements[5]:

> *"...first identify exactly what someone working in the specific context actually does in their job..."*

> *"...Sometimes this can be done through questionnaires but probably the best way to go about it is to observe real working situations. It's easy to tick boxes in a questionnaire to say what you think you do but, in fact, you may not realize all the other things you do as well. Things that an impartial outside observer will notice."*

Agritourism business survey

After identifying the target audience (see Target groups, below), the TREASUREHUNT project partners prepared and sent out structured questionnaires, conducted face-to-face interviews in each of the five countries participating in the project, visited many agritourism farms, and conducted on site observations and exchanges with the owners during Transnational Project Meetings (TPMs).

The following places were visited during various TPMs within the TreasureHunt project context[6]:

1. Tiraholm Fishfarm, Sweden; Farm Tour; presentation by Malin Ekwall & Juha Rankinen; English, Q&A

2. Skullaryd Moose Park, Sweden; Farm Tour; Eric Öster; English, Q&A

3. Cow farm, Sweden; Farm Tour; owners speaking Swedish; interpreted; Q&A

4. Karaiskos Farm, Volos, Greece; Farm Tour; owner cooperating with third party speaking English; Q&A

5. Bellos Farm, Agios Dimitrios, Mt. Olympus, Greece; Farm Tour; owner speaking Greek; interpreted; Q&A

6. L' Albufera lagoon, Valencia, Spain; boat tour; boatmen cooperating with English speaking guide; Q&A

7. Local bakery, Matera, Italy; Lunch with local delicacies; history of business, recipes & local traditions for bread making; interpreted; Q&A

8. Masseria La Fiorita, Matera, Italy; Farm tour; food preparation using local recipes; owner's daughter speaking English; Q&A

9. Alpaca Farm, Pelles I Sunnaryd, Sweden; owner's English-speaking wife Lisa gave us a farm tour, spoke about activities on farm, alpaca keeping, local customs and traditional coffee-boiling, products sold; Q&A

10. Öströö fårfarm, sheep farm, Sweden; English speaking owner Kristian spoke about the history of the business, "Customers paying to hear me explain my job", the two sales stands with home-made products, increasing sales during the Covid-19 epidemic, the lamb-safari ride, and slow ramping up of the business; Q&A

11. Erikson Cottage, Sweden; run by English-speaking sisters in-law Elisabeth and Katarina, 30 ha forested family property, prepared sour dough for pizza making demonstration and hands-on experience (made our own pizzas), nature-houses in the property; Q&A

12. Casal Dragone, Matera, Italy; family business of two sisters and one brother, English speaking Angela gave us a farm tour, spoke about family vineyards and wine-making, local food items, cooperation with other local food producers for food procurement; Q&A

In each of the above visits, owners spent 90% of the time interacting (speaking and listening) with visitors. The subject was mostly on farm business background, farming activities, etc. and the vocabulary was structured mostly on the farm tour.

Survey weaknesses

1. Small sample size both in number of respondents and countries.

2. Little information about the other linguistic skills (reading, writing).

3. No information collected about pronunciation and accent or proper language use.

Conclusions

Despite the survey weaknesses, the following conclusions can be drawn from the needs analysis.

1. In all cases, the farm tour was storytelling about the business.

2. All communication, business presentation and Q&A sessions were held in English either directly with the owner or through an interpreter.

3. English is essential for any agritourism business for presentation and promotional purposes.

4. Whereas oral communication (speaking and listening) is handled adequately, written communication (reading and writing) is expected to present serious problems.

5. Vocabulary was rather narrow, but sufficient for describing the focus of the agritourism business and for a farm tour, including farm animals, plants, cultivation methods and food recipes, vineyards cultivation, wine making and tasting, etc.

6. From a wider perspective, there is a severe problem in agriculture of the EU. The younger generation does not want to stay and cultivate the land. Young people we saw in some farms stayed because the property belonged to the family for four generations (Tiraholm), or they were just self-motivated to stay (Skullaryd; Karaiskos Farm).

Facts & Stats

- Humans have short attention span not exceeding 8 minutes.

- Average human attention span has decreased from 12 minutes to no more than 5 minutes[7].

- From 2014 to 2019, human attention span has decreased from 11 seconds to 8 seconds, putting humans below goldfish.

- According to studies, the average millennial picks up the smartphone 150 times a day. This over-dependence on tech is known as *technology addiction*.)[8]

- People check their phones every 12 minutes [9]

According to "the treetop therapy"[10]:

- Most popular articles on the Internet have an average reading time of 6-8 minutes.

- Average attention span of Gen Z individuals is about 8 seconds, compared to 9 second attention span of a goldfish, probably due to many distractions surrounding humans.

- The average attention span of a teenager is 32-48 minutes.

- The average audience attention span is 8-10 minutes.

- An office worker will check their email box 30 times every hour. Young individuals, even more frequently.

- The average webpage visit lasts less than a minute, and users often leave webpages in 10-20 seconds.

Thus, learning activities in this Study Guide are organized in learning bursts lasting no more than 8 minutes each and thus several chunks (see Chunking, below) can fit in one hour.

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Figure 1: English is a weird language

Target groups

Aspiring agritourism entrepreneurs

Age: ≥ 17 years old

Assumptions

1. Entry-level standards for the course: Learners at the B1/B2 level of English of the Common European Framework of Reference for Languages.[11] If in doubt, test using The Oxford 3000 list of most important words to learn English, from A1 to B2 level.[12]

2. No teacher presence in a classroom environment. Learning coaches stay on the sidelines as academic advisors and to verify learner progress.

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3. Learners are the masters of their learning. They cooperate with learning coaches for advising, but the burden of learning is entirely on the shoulders of learners.

4. Learning coaches have authored the training material in each Module and provided input for the Educational Games (https://treasurehunt-games.oikothesis.org/). Learning coaches have prepared the sample tests, selected the basis of the Educational Games both for practice and self-assessment.

5. UK English was selected as the language of the training material. However, most of the information available on the Cloud, and especially the audiovisual material on YouTube, together with the recent explosive growth of AI tools and language-learning commercial applications, is predominately in American English. Abundant material is also published in other English versions, pronunciations, accents and intonations from countries, such as India or Australia, and even by non-native English speakers. This material was not excluded for not being strictly UK English; instead, it was included, whenever necessary, to augment learner exposure to other versions of English.

6. Five-day weeks and 6-hour working days were assumed as standard.

7. Average speaking speed of about 150-180 words per minute, and possibly 190 words per minute; short bursts of up to 250 words per minute possible when reading something.

8. Free and open-source software used throughout this training guide, although tools behind paywalls have been mentioned occasionally.

9. No learning disorders, disabilities, etc.[13]

Self-study guide philosophy

This Self-study Guide contains many links to other resources, such as YouTube videos, webpages, web apps, etc. This wealth of information provides a good opportunity to expose learners to diverse material in a live form and thus to practice their language skills. Users may replay videos or parts of videos that might be at a high speaking speed, and thus difficult to understand.

If learners have trouble keeping up with the speed or pronunciation or accent of the speaker, they can get help by clicking on the Subtitles/Closed Captions icon (CC) on the YouTube video to have the subtitles in English. This will enable learners to sharpen their listening and reading skills. If learners continue to have trouble even with subtitles displayed, they can turn on the translation feature for the video.

Warning: activating the automatic translation mode may be beneficial in the short run, but might become detrimental for your overall performance as learners' brains become more lazy and they study less. Therefore, it is recommended that learners exhaust all other possibilities before clicking on the Subtitles/Closed captions icon.

Learners may stop, resume or replay each video as many times as they want.

The above learning scheme covers fully the allocated time to learning and does not leave room for spare time activities. All time is invested in mastering the material, and left over time is used to repeat the material.

Learners in charge of their learning

In a self-study environment, learners will be in charge of their own learning.

Like Schrödinger's cat in Quantum Physics, Learners will be at both ends of the learning spectrum: they will be teachers of themselves, and actual learners at the same time.

It is a difficult mission that requires commitment and responsibility; most importantly, requires active learner involvement instead of passively receiving information.

Success is not guaranteed: only those hard-working learners rising to the occasion will be able to shine. Most of the learners are used to receptive language skills and learning and it might take some time to get used to the new learning model.

Free virtual classroom platforms

Visit https://www.edapp.com/blog/top-10-virtual-classroom-platforms/

Addictive learning

Can learning be addictive? The answer seems to be a resounding YES.[14]

The ultimate goal of any educational system must be to make learning addictive.

Watch the video How to Make Learning as Addictive as Social Media[15] from Luis Von Ahn, the founder of Duolingo, a 300 million user language learning platform. In the video, Von Ahn provides some hints on how Duolingo manages to engage learners by sending them messages about keeping up with the English learning lessons. Most of the things that involve repetition, can be gamified.

To reach addictive learning, teacher enthusiasm, teaching style and motivational skills are essential. In self-paced courses, however, the presence of learning coaches and thus teacher-learner interaction will be limited. It may take only a few carefully selected words by the teacher to motivate a learner to study, assuming that the teacher has a good knowledge of the learner personality. This is an important topic on any learning/teaching environment, and not just in the agritourism field.

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The ultimate goal of the Educational Games is to make learning a habit, self-feeding and sustainable. How long does it take to form a learning/studying habit? Opinions diverge: published studies claims that it takes from 66 days to 10 weeks to build a health habit of going to the gym.[16].

Our personal experience from birdwatching field trips with students is that it takes less than 10 hours in the presence of a highly motivated teacher for learners to get hooked to bird identification. In contrast, *it takes less than an hour to get hooked on playing some video games for fun*. By extrapolation, it is expected that in a self-study English learning environment, highly motivated learners will form a study/learning habit within a couple of days of full-time studying, whereas less motivated learners will need a few weeks to develop a learning habit.

Self-paced study

Definition

Learners set and proceed at their own pace, i.e. they can work and complete the phases of the project; set deadlines within a pre-defined time window agreed with the learning coach; practice, review, assessment & take final evaluation test – using Computer Based Learning, Ed Tech tools and AI methods minimizing educator intervention.

Resembling Independent Study (see The origins of self-paced courses below)

The origins of self-paced courses

Over forty years ago, U.S. academic institutions recognizing the fact that despite the long lists of offered courses Universities cannot cover all academic needs of learners, started offering "independent study" courses. These were flexible, one-semester, usually one-off courses, although some of them could be repeated for credit, each worth up to three academic credits aiming to cover special academic needs of interested learners. The academic needs could be a topic of special interest to the learner not covered by any of the regular courses listed in the Academic catalog.

Self-paced courses are often reserved for graduate students working on their dissertation research and provide a way for in-depth search of a specific dissertation question. At the beginning of the semester or earlier, interested students meet with an academic advisor agreeing to start the project to discuss the details, such as to prove the need for taking such a course, the subject to be covered, whether the material differs substantially from any other offered course, to set deadlines and deliverables, the amount of work involved (books or papers to be read, output volume or number of papers, reports or essays to be written, length of reports, etc.). Throughout the semester, students meet regularly with the advisor to seek advice, if needed, and to make any schedule amendments if necessary. Deliverables include a number of research or literature review

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papers or essays, each handed-in by the set deadline, assessment and faculty feedback to the learner.

Self-study guide layout

The Self-Study Guide is divided in three parts.

Part I is the General Part is the theoretical part and it is mostly addressed to educators. It provides the necessary background information on the origin and evolution of self-study courses, the needs for developing English learning for agritourism, and general guidelines on how to coach learners in a self-study environment.

Part II describes the Learning Process and it is addressed to intermediate level learners. It includes the bare minimum information, tools, resources, methods, examples and educational games learners will have to use in preparation for taking the TREASUREHUNT project Evaluation on the e-learning platform (https://edu.treasurehuntproject.eu/modules). Learners taking Part I will practice with the material provided as is; no other learner action is required, for example to prepare exercises or repurpose the training material for new exercises/games, etc.

Part III comprises the Appendices and it is addressed to educators and advanced level learners who want to learn by doing. It contains chapters, such as Web searching, Language learning utilities, AI enhancements, Good writing practices, etc that are supplementary to English language learning and agritourism. It is an immersion learning environment in which learners build their own practice material (exercises, games, etc) using free and open source tools downloaded from the web, and based on PR4: A TRAINING PACKAGE ON AGRITOURISM (https://treasurehuntproject.eu/download/pr4-training-package-on-agrotourism/) and practice before taking the Evaluation. It requires some technical skills in CBT, but also provides the freedom to select and develop the building blocks of learning the 4+1 Linguistic Skills, such as text excerpts, closed-type exercises, audiovisual material, and attempts to explore the use of AI for language learning.

All three parts are open to and accessible to the public from the TREASUREHUNT project website (treasurehuntproject.eu).

The 4+1 linguistic skills

As it was mentioned in the Conclusions section above, communication skills include:

Emphasis on speaking and listening

Writing and reading are also essential, but are used less frequently and may require additional help

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Vocabulary skills were not scouted specifically.

Table 1: Broad learner objectives by linguistic skill and usage

SKILLS	LEARNERS MUST BE ABLE TO	USAGE
Listening	Listen and understand standard native English content	**Be a good listener**
Speaking	Express themselves clearly through spoken language	**Storytelling**
Reading	Read and comprehend text that is not too technical	**RTFM**
Writing	Express themselves clearly in writing	**5W+1H**
Vocabulary	Master and use the 595 agritourism terms effectively	**Web search**

Grammar?

English Grammar was not included in the training material developed for the TREASUREHUNT project.[17] This decision was made for three reasons:

1. People do not use Grammar consciously when they speak or listen. In other words, they do not stop to think how to formulate the proper tense of a verb, or number or declension of a noun or adjective, etc. If they do that, they lose the core meaning of what they want to say. Rather, people receive and produce information and delegate Grammar processing to the subconscious. That's perhaps the main reason that study of Grammar is being dealt with in the first stages of English L2 learning. Fortunately, English Grammar is not too difficult as in some other languages, so early learners can handle it relatively fast.

2. It was assumed that the target audiences have a sufficient knowledge of English language and Grammar (B1/B2 level of CEFR) (see Assumptions, above).

3. Usage of Grammar for web searching. Even before the advent of AI, search engines were error tolerant; that is, the outcome of the search was not affected even if people enter something that was not grammatically correct or contained spelling errors, etc. In the unusual case that a search engine does not understand something, it will suggest a correct alternative such as "You searched

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for... Did you mean...". Learners may want to experiment with web searches constructed from disjointed lists of keywords and compare them with searches using proper English.

This decision resulted in leaving out topics such as: English articles, English expressions, Irregular verbs, Phrasal verbs, Prepositions, etc.

In other language applications, such as writing, however, Grammar is essential. But, there are extensions, applications, etc that can automatically handle Grammar and suggest corrections while entering the text (see .Grammar and vocabulary checkers, below).

Caution: always check the results of the autocorrector and other grammar-handling applications.

And lastly, there is a variety of freely available tools, add-ons and extensions for any word processor application that can correct spelling, grammar and syntax errors on the go.

Consequently, grammar and syntax are considered topics beyond the scope of this Self-Study Guide and should probably be left for English Literature majors.

Learn a language like a baby

The approach that will be used here reflects how babies learn to communicate.

Briefly, babies listen to and focus on the sounds around them, vocalize and produce incomprehensible sounds, discover how to control their vocal chords to produce specific sounds and eventually form words, followed by associating word sound with concepts, and putting the words in order to convey compound meanings.

The main point of successful language acquisition is that babies do not feel ashamed to speak. They feel no guilt or inhibition to make weird noises, mistakes, because probably they are unaware of mistakes and errors. They start experimenting from the very simple *ba*, *ma* and *da* sounds; this is probably why the words 'mother' and 'father' in many languages include the above sounds; for example, *dada*, *daddy*, *dad*, *mama*, *mamma*, *mam*, *maman*, *moar*, *babo*, *баща*, or *papa*, *papi*, *pop*, etc.

Babbling begins shortly after birth, with vocalizations involving flexing of the throat muscles and contraction of the vocal chords, and continues to the age of 12-18 moths. Noticeable differences occur between boys and girls with the latter having a clear head start in language development, but the end point being the same after a few years.

Babies lack shyness and inhibition resulting from fear to be exposed or making mistakes. Babies are totally ignorant of what people have to say about their language skills or lack thereof, and continue to speak the way they think is right or funny. In fact, people find baby language errors charming, funny and cute; that triggers feelings of affection and the urge to help babies learn faster.

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Later on, in elementary school, children learn to read and convert spoken language into written symbols (letters) and vice versa. Interestingly, grammar and syntax are nowhere to be found in the above sequence and appear much later, actually forced upon schoolchildren, at school age.

Although the borders between the onset of the 4 + 1 linguistic skills often are blurred, it seems that receptive (listening and reading) and productive (speaking and writing) skills are intertwined. More specifically, babies obtain skills in the order:

<div align="center">Listening > Speaking > Reading > Writing</div>

The above biological/chronological sequence to language learning has been recently endorsed by the British Council as a helpful model for teaching English to adult learners.[18]

Moreover, skill differentiation between receptive and productive ones is a superficial and anthropomorphic and disregards the fact that skill learning occurs simultaneously; for example, listening and vocalization come much earlier in childhood than the development of reading and writing skills. People that did not have a formal education, and thus were not taught reading or writing or grammar skills, can communicate remarkably well in everyday spoken language. Interestingly, some of these people were self-taught in reading and writing to a satisfactory level. Vocabulary building, on the other hand, is a process running in parallel and in a positive feedback loop with each and every one of the four skills.

Grammar and syntax seem much more complicated skills and probably remain elusive for many native-English speakers too. It is commonly suggested to develop a feel for grammar and proper word order instead of being preoccupied with learning every single rule about them;[19] sometimes, paying too much attention to Grammar and syntax can have negative effects and can inhibit language learning.

Learners do not have to be at the early stages of their lives to learn English using infant-derived methods. As recent research has shown[20], learners starting to learn English much later in life can reach incredibly high levels of English proficiency[21], although some researchers claim that infancy might be the critical period to learn new languages.[22] There are even claims that adults are better than children in learning languages.[23]

It is acceptable for people not to speak perfect English as long as others will be able to understand them. In fact, native-English speakers are very permissive and find it interesting to listen to a foreigner speak. Neither do non-native English speakers need to devote too much time for perfecting their English. After all,

<div align="center">*perfect is the enemy of good* and</div>

<div align="center">*beauty is in the eyes of the beholder*.</div>

There are, however, fundamental differences in First Language Acquisition (FLA) vs. second language acquisition (SLA). Some sources claim that FLA is instinctive[24], meaning FLA is like writing on a clean slate and thus, FLA is probably easier and faster than SLA. Other studies claim that native language may interfere in learning a second language, and thus may have an inhibitory

effect on SLA.[25] Still others claim that language learning ability decreases dramatically after the age of 3-7 years.[26] Other personality traits accounting for differences in FLA vs. SLA include personality, culture, motivation, mother tongue, etc.[27] On the other hand, studies claim that SLA usually takes place at an older age; thus, the brain has been trained to receive and process information, such as language learning, and this results in increased learning capacity.

Consequently, this self-study guide follows the same order as in baby learning the 4+1 linguistic skills (listening, speaking, reading, writing and vocabulary), whereas the differentiation between receptive and productive skills, although useful in some cases, will be ignored.

Methods to learn English as a second language

See PR4: TRAINING PACKAGE ON AGRITOURISM, p. 135

Learning apps & tools

For the theoretical part, refer to Learning apps and Learning Tools in PR4: A TRAINING PACKAGE ON AGRITOURISM, pp. 135 - 136.

Download and install the free and open source Hot Potatoes suite[28].

For more information on Hot Potatoes, see Hot Potatoes suite for interactive exercises, below.

Consult the Help facility of each of the 5 Hot Potatoes applications.

For tutorials on how to use the software, visit https://hotpot.uvic.ca/tutorials7.php.

For an extended list of Hot Potatoes features, visit http://www2.gwu.edu/~francais//.

For vocabulary studying, see Spaced repetition, below.

A detailed list of tools is provided in Appendix 2 – Language learning utilities, below. Consult the Help facility and Tutorials on the web for each tool.

For instructions on how to build your own exercises using the Hot Potatoes suite, see "How to construct your own exercises and tests"[29]

Serious fun

This ain't no party
This ain't no disco
This ain't no fooling around

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Learning with no fun is no learning.

Fun and games can be very serious learning resources and lead to spectacular results.

According to a recent study, 91% of learners value fun in learning.

91% of students value fun in learning

91%

Highly-engaged teams increase productivity by...

14%

Gamification increases productivity by...

50%

Learning games boost knowledge retention by...

9%

Figure 2: The benefits of having fun in learning

(courtesy of: https://www.growthengineering.co.uk/fun-in-learning/)

Ask yourself the question: What other learning method am I going to use if I don't find fun in learning?

Self-chosen learning is fun; learning is the reward young animals get for being curious. This is what keeps them exploring and learning.

Learning in a school environment, however, is hard. Avoiding or minimizing these hardships is probably the ultimate motive of the TREASUREHUNT project, which was designed to elicit maximum learner involvement.

Obviously, **learning remains the focus** and distractions, such as gaming, should not interfere to shift the balance from learning to playing.

Due to the limited learner-educator interaction, we have introduced the Educational Games for each one of the 4+1 linguistic skills, at the Intermediate Learner Level. These games were developed based on strict standards (see Development principles, below). For the Advanced

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Learner Level, we have tried to cause even more learner involvement and experimentation with the learning material.

Challenges and how to respond

Lack of learner motivation

Lack of educators imposed by the self-paced environment – Fortunately, AI technologies have become widespread and can alleviate the problem (see Chatbots for conversation practice, below.)

To cope with the lack of educators, TreasureHunt project learning coaches (project partners) will have to plan in detail the self-testing and evaluation process. To accomplish that, learning coaches will have to provide as much Machine Learning as possible, that is train the computer by providing interactive and self-correcting tools for English learning.

Procrastination

Bridging the gap between receptive and productive competence (https://www.cambridge.org/elt/blog/2015/08/27/bridging-gap-receptive-productive-competence/)

Proposed learning plan

The proposed learning plan for each of the 4+1 linguistic skills is based on PR4: TRAINING PACKAGE ON AGRITOURISM[30] and is organized as follows:

LEARNING OBJECTIVES

SET SMART GOALS

STUDY

      End point (compared to SMART goals)

            Near: over 90% of set SMART goals on 4 trials spaced 2-3 days apart

            Far: below 75% of SMART goals

PRACTICE

      Daily schedule

      Tools

Methods

Active/Hands-on learning (learn-by-doing)

Test development

Deliverable: Table of ... skills educational games development

Desktop environments

Smartphones

Performance monitoring

```
Learners prepare their own performance monitoring plan depending
    on the linguistic skill; for example, keep track of:
```

- number of words in the original text
- how many times did you have to listen to the text until you got a good handling of it?
- how many minutes did it take you to read through the text?
- how many words did you read?
- how many words did you omit or skip or forget to read?
- how many mistakes (mispronunciation, etc) did you make?
- how many times did you stop and restart reading a sentence?
- how would you rate your listening/speaking/reading/writing/vocabulary performance?
- assuming an average native-English speaker reading speed of 190 *correct* words (= total words – omitted - mispronunciations) per minute, was your reading satisfactory?
- ...
-

```
Self-assessment
```

REVIEW

EVALUATION

PART II – LEARNING

Introduction

By definition, this Self-Study Guide will present only the minimum information. As a result, in many cases the information presented is in bulleted list format. Of course, interested parties are welcome to research and enrich the training material on their own. A more detailed online version might be prepared after the end of the TREASUREHUNT project.

Gather your resources

Your superpowers

See PR4: A TRAINING PAGKAGE ON AGRITOURISM, p. 132.

- MOTIVATION vs. OBSESSION[31], [32] – intrinsic vs. extrinsic motivation debate[33]

  Good requires motivation, great requires obsession
- COMMITMENT
- DETERMINATION
- COURAGE
- SENSE OF DUTY
- PERSISTENCE
- IMMERSION
- PRACTICE

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The TREASUREHUNT project training material

The website

The home page of the TREASUREHUNT project (https://treasurehuntproject.eu/). Includes the purpose, aims and objectives, News and Newsletter, as well as the Partnership of the project, and serves as a link-catalog to onsite and offsite Product Results.

PR4 – Training package on agritourism

PR4: A TRAINING PACKAGE ON AGRITOURISM (https://treasurehuntproject.eu/download/pr4-training-package-on-agrotourism/) is the starting point of studying for each of the 4+1 linguistic skills and provides the theoretical background for the project.

The Package was developed and is addressed to entrepreneurs who are thinking of starting their own medium-sized agritourism business (PR4: TRAINING PACKAGE ON AGRITOURISM, p. 3).

The text outlines a program designed to equip aspiring agricultural entrepreneurs with soft skills, guidelines, methodologies, tools, topics, and competences. The goal is to help agritourism entrepreneurs understand and benefit from the synergy between agriculture and tourism, build their soft skills and enable them to establish successful and sustainable businesses (approved TREASUREHUNT project proposal, p. 74).

The Package includes six Modules with three Lessons each. Lessons use a common layout with the following sections:

1. Learning Outcomes – what learners will have accomplished after completing the Lesson,

2. Did You Know? – some introductory facts to trigger learner curiosity,

3. Let's get to the point! – the body text with the main content o the Lesson,

4. Time for exercises! – mostly closed-type exercises based on the body text with answers,

5. Case studies, interviews, and Real life examples – self-explanatory.

The e-learning platform

The e-learning platform (https://edu.treasurehuntproject.eu/modules) is as an augmented implementation of the PR4 and the exit point from the TREASUREHUNT project learning environment for learners who sign up and complete the interactive tests posted. The platform provides Profile customization, and allows networking with users sharing similar interests in agritourism.

All PR4 training material has been posted online, by Module and Lesson within Module. Full, rich text available with working links, etc. Organized in the same layout and standards as the PR4:

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TRAINING PACKAGE ON AGRITOURISM (see above), the e-learning platform is essentially a transfer of PR4 to .html format. Can be used for listening practice provided an appropriate, good quality text-to-speech browser extension or add-on, such as Read Aloud: A Text to Speech Voice Reader, is installed.

Users wishing to receive their attendance certificate must sign up to the platform, study each Module, and complete the Exercises at the end of each Lesson. Progress is monitored and displayed as percent completed. Learners can interrupt their learning flow, and return at a later time, without losing any of their previous work. Test taking can be repeated as many times as required for successful completion.

Multimedia glossary

The TREASUREHUNT Glossary (https://treasurehuntproject.oikothesis.org/) is an attempt to eliminate language barriers by bridging the terminology gap in the agritourism field.

The Glossary can be used as a standalone application or in combination with the PR4: TRAINING PACKAGE ON AGRITOURISM. Consequently, the Glossary is considered as the most important TREASUREHUNT Project Result, as it provides the key to unlock web searching AND for discovering a wealth of information and business opportunities in agritourism and elsewhere. For an effective web search algorithm, see Appendix 1 – Web searching.

The Glossary provides a set of 595 agritourism-specific terms translated into the six project languages and, thus, all pair combinations of the six languages. Any of these pairs of translated dictionary terms can be used as glossaries for translations.

The glossary contains the definition of each term (in English), the pronunciation in British English, and the translation into each of the five languages of the TREASUREHUNT project. It is indexed (searchable) by each one of the six project languages (English, Bulgarian, Spanish, Swedish, Greek and Italian), and thus it can be used for translation in any language combination (e.g. Spanish to Swedish, Bulgarian to Greek, etc).

The glossary is comprehensive but not complete and more terms or languages could be added in the future. It was developed, however, by humans for humans and was checked by humans; thus, it offers a reliable service for which AI is not very well trained yet; therefore, the Glossary represents an example of human work enhanced by AI in a balanced coexistence.

Educational Games

The Educational Games play a crucial role in the TREASUREHUNT project.

In contrast to the stationary format of PR4 – Training package on agritourism, above, the TREASUREHUNT project Educational Games (https://treasurehunt-games.oikothesis.org/) provide an attractive, dynamic, interactive, multimedia and engaging environment by Lesson and Module.

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They are the tool where learners can:

a) practice their 4+1 Linguistic Skills,

b) monitor progress,

c) take self-assessment tests[34],

d) get acquainted with the types of questions in the Evaluation,

e) review their knowledge,

f) diagnose weaknesses,

g) decide whether any further action is needed

h) fill out any remaining voids in their knowledge, and

i) devise a test-taking strategy before taking the Evaluation (see The e-learning platform , above).

For all these reasons, learners are encouraged to make the Educational Games a regular part of their study before taking the Evaluation (see Figure 10, below).

The Educational Games follow the sample format provided in the *Time for exercises!* section of PR4 – Training package on agritourism, above.

In general, gamification provides various versatile tools that can be adapted to a variety of topics ranging from Environmental Science to History. More specifically, the TREASUREHUNT project Educational Games provide numerous question types and can link to audiovisual and multimedia material. Each Educational Game is usually based on a previously entered database comprised of several questions and/or terms. The order of questions is randomized each time a test is taken; this provides a dynamic nature, avoids "learning order effects", and serves as a safety measure against academic misconduct.

Some game types have been used with impressive success in previous Erasmus+ projects, like the twin Tools for Skills and Tools for Skills Teacher Training projects[35], to provide more engaging content and stimulate learning interest among learners. The gaming approach was an award-winning training tool voted as the top training tool by a multinational group of educators in the 4th International Conference of Forestry Training Centers[36].

A weakness, however, of most of the above publicly available word games is the limited customization, that is the capacity to enter the terms or words of a specific glossary or set of words once the games are posted online. For example, many online educational games do not provide the capability of inserting a customized list of terms, such as the TreasureHunt project glossary. Fortunately, however, there are many free and open source software, such as Crossword Express[37] comprising a variety of highly customizable learning games, such as wordsearch, wordweave, etc.

The conclusion from the above is fourfold:

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a) people are having fun playing word games as evidenced from the huge popularity of word games worldwide

b) some word games use cutting edge technology for improved learning results,

c) educational games are powerful tools for addictive language learning, and learning of other skills too

d) word games are endorsed by major English language Institutions as effective language-learning tools.

For all these reasons, Educational Games were developed for each of the 4+1 Linguistic Skills within each Module and Lesson of the TREASUREHUNT project. Game development followed a well-defined set of Development principles (see below).

Development principles

The Educational Games developed for language learning in the TREASUREHUNT project are based on the following principles:

1. They provide free games for user-friendly and effective learning.

2. They are agritourism-specific and based on the 6 Modules of TREASUREHUNT PR4.

3. Animation, fancy graphics, sound effects and special effects were unacceptable as they promote distraction.

4. The Games provide fast-track learning, as users can check their answer immediately without the intervention of third parties.

5. They contain closed-type questions with well-defined answers. This may seem counterintuitive, and it might be argued that closed-type questions do not allow learner critical thought development. Closed-type questions, however, is the most effective learning method in a self-study environment, such as the TREASUREHUNT project, as the method limits trial-and-error and provides immediate error-checking and correction. In a future embodiment or extension of the TREASUREHUNT project, more Educational Games could be added including open-type questions, but still operating within an environment of limited teacher presence.

6. They allow learners to learn from their mistakes, without being reprimanded or socially stigmatized.

7. Learners can learn at their own pace, and they are not being monitored or graded or exposed to a class environment. Therefore, they eliminate learning inhibitors, such as shyness or test anxiety or fear of failure in a classroom environment.

8. Practice anywhere, anytime and as many times as necessary.

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Materials & methods for game development

The Educational Games were developed by all TREASUREHUNT project partners, each of them being responsible for the Module authored in PR4: A TRAINING PACKAGE ON AGRITOURISM. The authors of the Self-Study Guide sent out to each Partner templates for selecting appropriate text excerpts from the PR4 Module each partner authored. Responses from Partners were collected and processed by our team and were converted to different closed-type questions/exercises using the Hot Potatoes free and open source software (see Hot Potatoes suite for interactive exercises, below).

The Hot Potatoes exercises were named collectively as Educational Games to make the material more attractive and engaging for learners.

Educational Game development included a series of additional steps, such as text-to-speak conversion including punctuation marks and recording in different playback speeds, text checking and simplification, providing alternative correct answers (e.g. "agrotourism" and "agritourism"), finding rhyming words, occasionally providing explanations for wrong answers, or answers accepted as correct although not including all missing words, finding and providing clues such as definitions, converting each one of the 595 glossary terms to audio using British accent, lists of glossary terms by lesson for Spaced repetition, (see below) etc.

Each Educational Game was originally planned for one Linguistic Skill only; however, there are more than one types of Educational Games per Linguistic Skill. During Game development, however, it became obvious that every skill included synergy with more than one skills. For example, in the Writing Skills Note taking game, learners will need to combine listening and writing skills, although there an effort was made during Game development to focus on writing skills.

Educational Games by linguistic skill

A total of 600+ Educational Games were developed in 17 game categories (see below), across the 4+1 linguistic skills, the 6 Modules and 18 Lessons of the TREASUREHUNT project. More specifically,

- 3 games for Listening Skills (Connections, Listen and fit and Listen Up)

- 3 games for Speaking Skills (Sounds Similar?, Rhyming words, Spot the not)

- 4 games for Reading Skills (Letter soup, Word detective, CluesO, Scripting)

- 3 games for Writing Skills (Spelling bee, Word safari, Note taking), and

- 4 games for Vocabulary Skills (TermID, Lord of the Words, Matchmaker, Crossword)

In this Self-Study Guide, the word 'game' means an activity which is entertaining and engaging, often challenging, exclusively designed for educational purposes.

Any of the 4+1 linguistic skills is not a single process; in most cases, each skills involves the interaction of two or more skills. For example, reading a book involves reading skills, i.e. the

association of written symbols in a specific order with concepts, objects, people, situations, etc. However, when someone starts asking questions to assess what the reader has understood or learned from reading the book, then a mixture of reading, listening, speaking and writing and vocabulary skills is involved.

Developing a Game exclusively for a single linguistic skill would be counterproductive and practically impossible. In addition, each linguistic skill is an interaction involving more than one faculties (abilities), senses and cognitive processes. Consequently, all educational games involve a combination of skills. f

Strengths and weaknesses of training material

PR4 in text form; good for reading skills but not much help about listening skills

Missing audiovisual listening material – PR4 can be converted to audio

Social interaction – missing to a large extent; however, AI tools offer alternatives

Despite its nice layout, occasional figures and icons, graphics, tables, links, references, and uniform layout across lessons, the PR4 material contains long and unattractive text; therefore, it is expected that learners will soon lose their interest and motivation[38].

In addition, young learners are not motivated to read and they prefer texting each other. Mature learners may have a busier schedule of daily activities, and they would prefer listening to the material while they drive or commute to and from work. Therefore, the text to speech conversion is probably an important aspect of the training material that needs to be developed.

Furthermore, although a table of contents is provided at the beginning of each Module, it is difficult to trace the main points of each of the three Lessons per Module. It is recommended to add a 10-15 point FAQ at the beginning of each lesson summarizing the main points.

From all of the above, it is evident that the material of PR4 needs to be upgraded and become more engaging for learners. The regular approach form making the training material more engaging includes the following:

Criticisms for the Educational Games

It has been said that the Educational Games are too tough for entry-level learners and that Games should be grouped by difficulty level.

It is true that some learners, especially the less experienced ones with English language, may find the Educational Games challenging. For example, in our agritourism business survey, we witnessed some senior citizens that managed to give their farm tour in English even though they never had any formal English education. And we were asked whether these senior citizens would ever be interested in opening the Educational Games of the theoretical part. We speculate that these non-

native English speakers learned to speak English due to similarity of their native language (Italian) with English, and repetitive presentation of the farm tour. For them, the Educational Games will be challenging and probably they will never consult the theoretical training material in PR4: TRAINING PACKAGE ON AGRITOURISM. In contrast, the Games should not be too difficult for young B1/B2 CEFR level learners. Learners wishing to invest their time and practice for the TREASUREHUNT project Evaluation part, however, will probably find the Educational Games quite useful.

It is wrong to believe that the Games are just for entertainment and learners at any level can wing them without preparation or study. The Games were not developed to be easy to take, because this would be defeating their training purpose; something very easy is not interesting and thus becomes boring. The Games were developed to stimulate learners to study English and the other soft skills mentioned in PR4: TRAINING PACKAGE ON AGRITOURISM necessary for an agritourism startup.

The TREASUREHUNT Educational Games and the project training material pack a substantial volume of information which may be scary for some learners. This is a case similar to textbooks and reference material. Textbooks contain a wealth of educational material, even though some learners may never open them to study in a classroom environment or may use them sparingly and only for specific subjects. In a self-study environment, however, learners will need to use the training material and the Educational Games to study. One way to deal with the volume of information is by Chunking (see above).

The learning curve is not too steep, and it is not necessary to know all technical details about how the exercises work. What matters most is for the learners to commit to studying, practice and create associations between the theoretical and practical part.

Lastly, grouping the Educational Games by level of difficulty is an interesting proposition that can be only partially answered here. For multiple choice tests, for example, the number of available choices offers a preliminary difficulty criterion: the more available choices, the more difficult the test. Thus, a True or False question is easier than a Multiple Choice question with 4 possible choices, because each of the possible answers in the first case has a 50% likelihood of being correct by chance alone, compared to 25% in the second case.

An in depth assessment of test difficulty, as well as training material suitability for educational purposes, has worldwide application, but it is beyond the scope of the TREASUREHUNT project.

How to use the glossary to support translation in each of the 6 project languages

In recent years, great strides have been made in the field of Machine Translation and Natural Language Processing. Machine Translation has been at the forefront of AI in the last 20 years. Machine Translation (MT) is the use of Machine Learning (ML) methods for translating text or speech from one language (source) to another language (target) including the subtle differences

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that make each language unique. Machine Learning, in turn, is a subset of AI concerned with computer training, i.e. feeding data to computers and providing the processing algorithms, so that computers will perform tasks without explicit instructions.[39] Applications of ML include Natural Language Processing, speech recognition and production, Machine Translation, predictive analytics, etc.

However, it is not certain today whether MT is a lifesaver or a plague. For example, Greek to English MT in Facebook gives a text that in many points is unreadable due to multiple errors stemming from computer failure to understand the source (Greek) language nuances. Without checking, the final text is borderline ridiculous and makes very little sense.–

Depending on the origin of source text, there are three types of translation items:

Documents

The following instructions refer to Microsoft Office on a desktop environment. It is further assumed that Microsoft Office does not have access to the Microsoft translation tool and hence the text cannot be translated directly.

Enter the text in Microsoft Word.
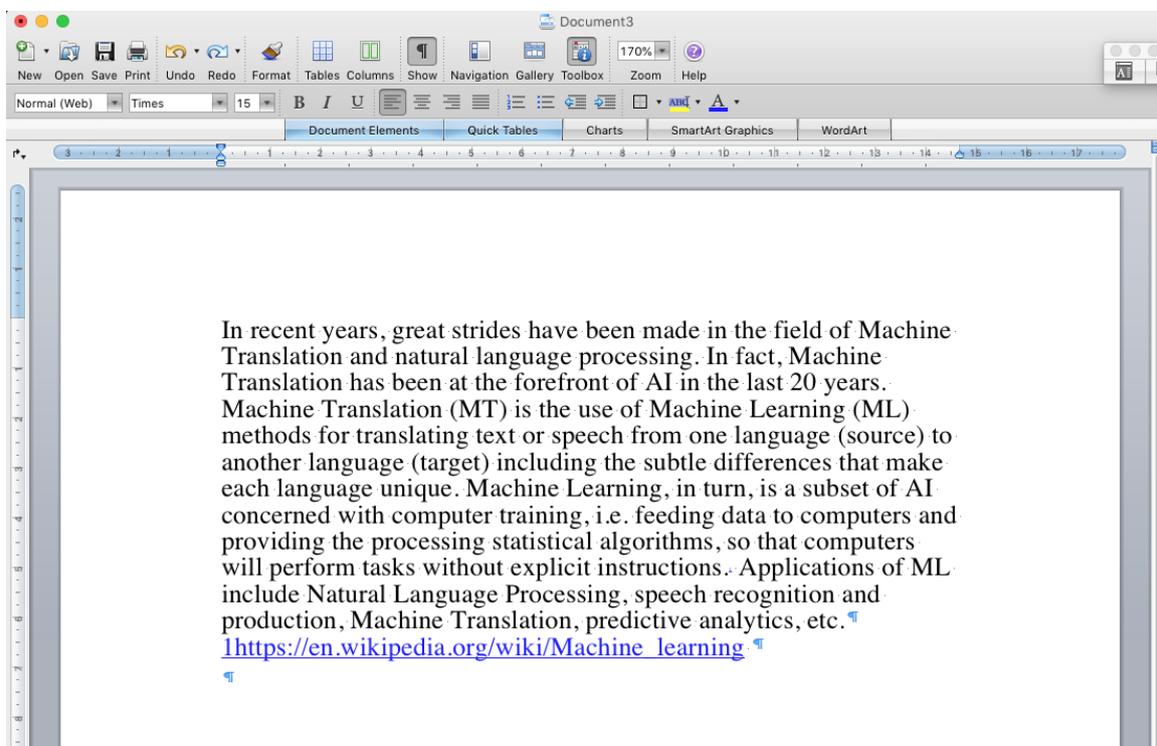
Break each paragraph to sentences. Use periods, semicolons, colons and/or any other punctuation mark appropriate as break points.

```
Edit > Replace > Find what: ".", Replace with: ".^p", Replace All.
```

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In recent years, great strides have been made in the field of Machine Translation and natural language processing. In fact, Machine Translation has been at the forefront of AI in the last 20 years. Machine Translation (MT) is the use of Machine Learning (ML) methods for translating text or speech from one language (source) to another language (target) including the subtle differences that make each language unique. Machine Learning, in turn, is a subset of AI concerned with computer training, i.e. feeding data to computers and providing the processing statisti... will perform tasks without expl... include Natural Language Proc... production, Machine Translatio... 1https://en.wikipedia.org/wiki/M...

The procedure for breaking the text to individual paragraphs is shown in the figure below.
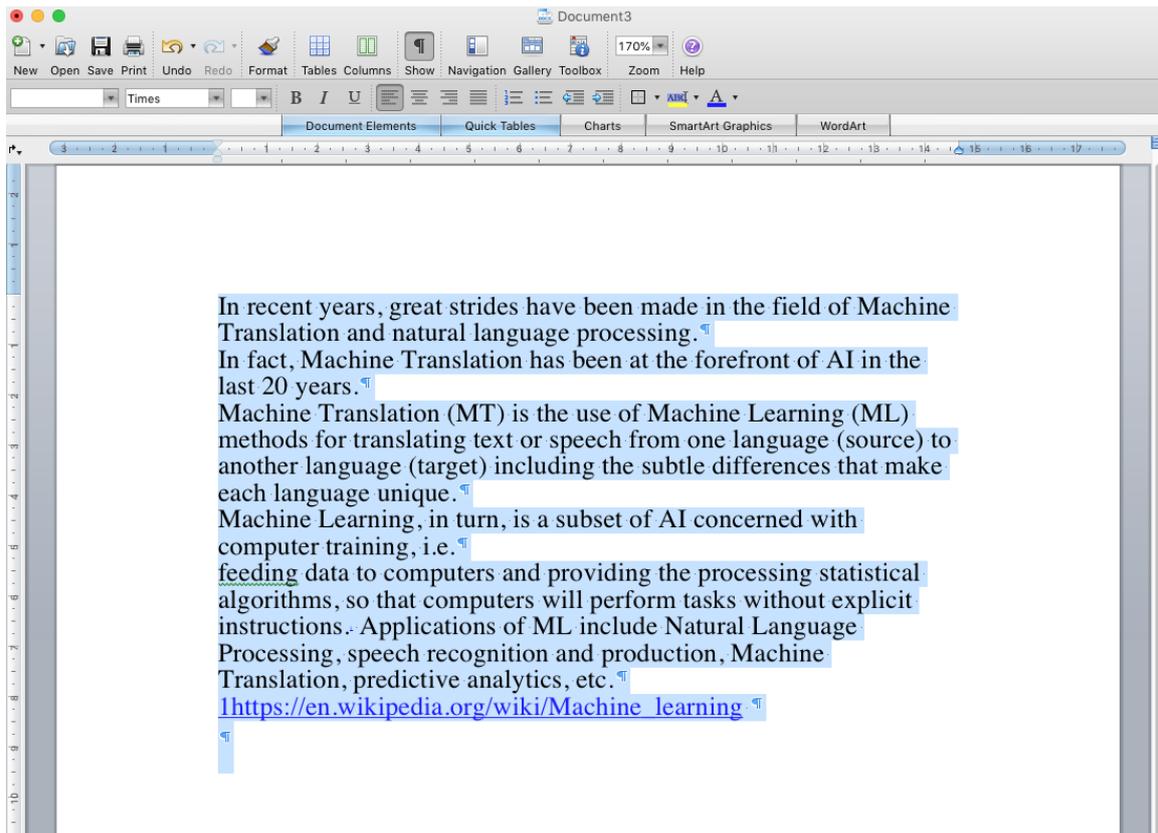
Figure 3: The source text broken down to paragraphs using periods (.) as breaking points.

Some breaking points were omitted and sentences failed to separate, such as "...instructions. Applications of ML...". Some other points, such as "...i.e. feeding..." were identified as false positives and yielded separate sentences.

Convert the text to a single-column table.

```
Table > Convert > Convert text to table; Number of columns: 1;
Separate text at -> Paragraphs > OK
```
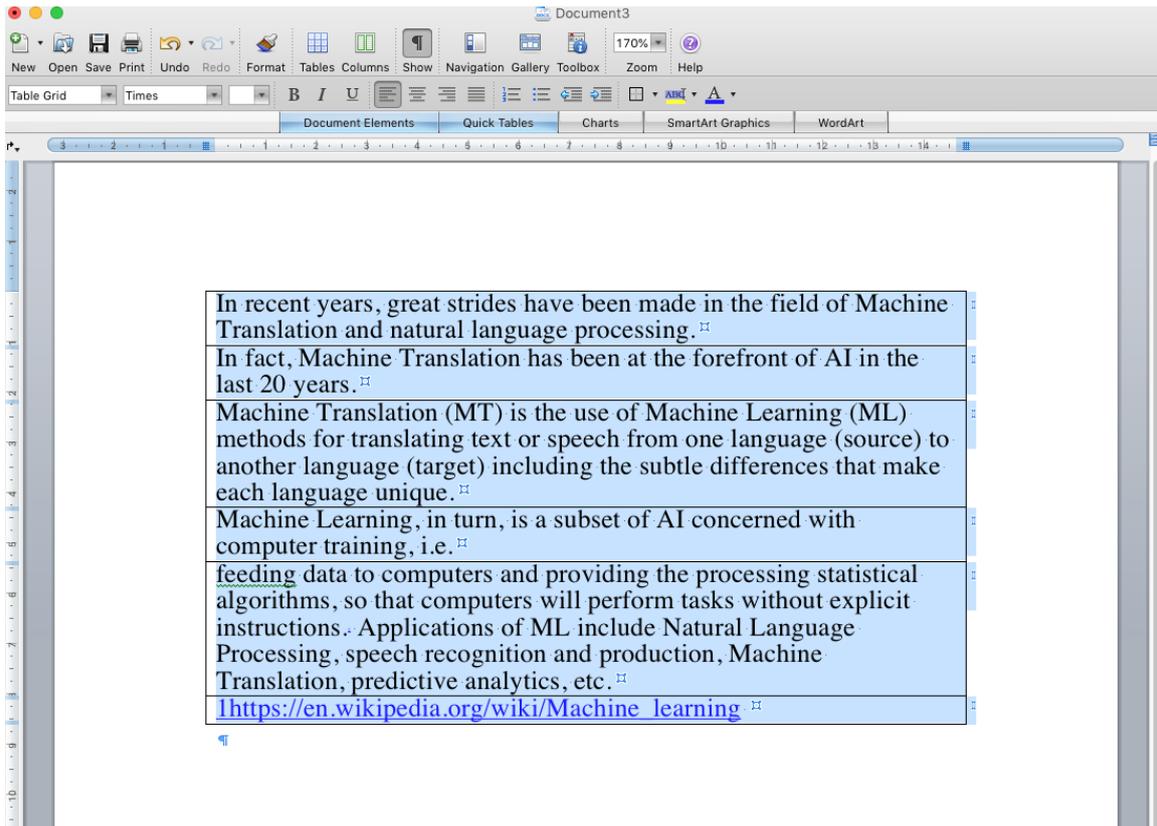
Figure 4: The source text converted to table.

Add one column to the right of the table.

```
Table > Insert > Columns to the Right
```
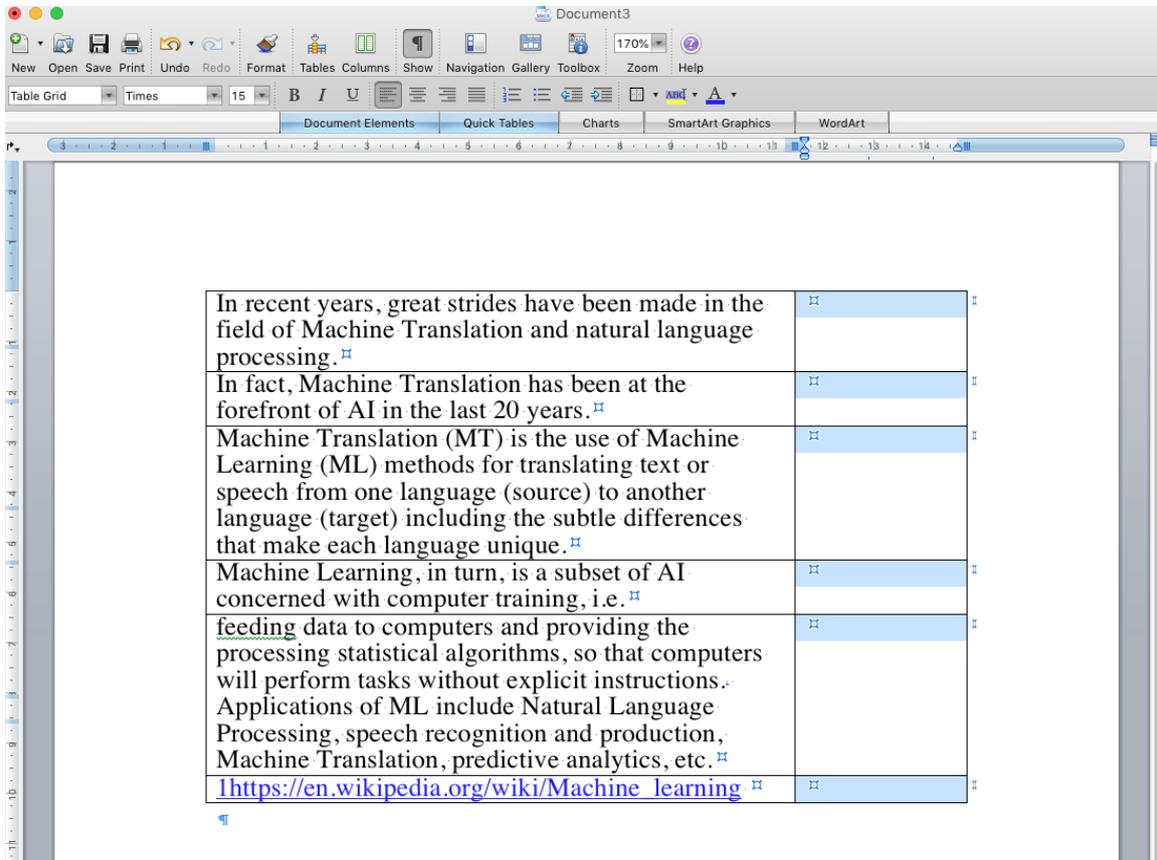

Figure 5: A column added to the right of the English source text

To equally distribute column width

```
Table > Autofit and Distribute > Distribute Columns Evenly.
```

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In recent years, great strides have been made in the field of Machine Translation and natural language processing.	
In fact, Machine Translation has been at the forefront of AI in the last 20 years.	
Machine Translation (MT) is the use of Machine Learning (ML) methods for translating text or speech from one language (source) to another language (target) including the subtle differences that make each language unique.	
Machine Learning, in turn, is a subset of AI concerned with computer training, i.e.	
feeding data to computers and providing the processing statistical algorithms, so that computers will perform tasks without explicit instructions. Applications of ML include Natural Language Processing, speech recognition and production, Machine Translation, predictive analytics, etc.	
1https://en.wikipedia.org/wiki/Machine_learning	

Figure 6: The two columns evenly distributed

The reason for converting the text to columns is because in a two-column format, it is easier to grasp and convey the meaning of each sentence, and to translate all text without missing any part.

For the agritourism-specific terms, use the TREASUREHUNT Agritourism Glossary (https://treasurehuntproject.oikothesis.org/) and enter the translation of each sentence in the corresponding cell on the right column.

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|	
In recent years, great strides have been made in the field of Machine Translation and natural language processing.	Τα τελευταία χρόνια έχουν γίνει μεγάλα βήματα στον τομέα της Μηχανικής Μετάφρασης και της επεξεργασίας φυσικής γλώσσας.
In fact, Machine Translation has been at the forefront of AI in the last 20 years.	Στην πραγματικότητα, η Μηχανική Μετάφραση βρίσκεται στην πρώτη γραμμή της τεχνητής νοημοσύνης τα τελευταία 20 χρόνια.
Machine Translation (MT) is the use of Machine Learning (ML) methods for translating text or speech from one language (source) to another language (target) including the subtle differences that make each language unique.	Η Μηχανική Μετάφραση (MT) είναι η χρήση μεθόδων Μηχανικής Εκμάθησης (ML) για τη μετάφραση κειμένου ή ομιλίας από μια γλώσσα (πηγή) σε άλλη γλώσσα (στόχο), συμπεριλαμβανομένων των λεπτών διαφορών που κάνουν κάθε γλώσσα μοναδική.
Machine Learning, in turn, is a subset of AI concerned with computer training, i.e.	Η Μηχανική Μάθηση, με τη σειρά της, είναι ένα υποσύνολο της τεχνητής νοημοσύνης που ασχολείται με την εκπαίδευση υπολογιστών, δηλ.
feeding data to computers and providing the processing statistical algorithms, so that computers will perform tasks without explicit instructions. Applications of ML include Natural Language Processing, speech recognition and production, Machine Translation, predictive analytics, etc.	τροφοδοσία δεδομένων σε υπολογιστές και παροχή στατιστικών αλγορίθμων επεξεργασίας, έτσι ώστε οι υπολογιστές να εκτελούν εργασίες χωρίς ρητές οδηγίες.1 Οι εφαρμογές της ML περιλαμβάνουν Επεξεργασία Φυσικής Γλώσσας, αναγνώριση και παραγωγή ομιλίας, Μηχανική Μετάφραση, προγνωστική ανάλυση κ.λπ.
1https://en.wikipedia.org/wiki/Machine_learning	1https://en.wikipedia.org/wiki/Machine_learning

Figure 7: The English to Greek translation as a two-column table.

The Greek translation on the right appears with red underscore because the language of the text has not been set to Greek.

To eliminate the red underscore, set the language of the text to… (in our example, Greek) as follows:

Select the right column, and

```
Tools > Language > Mark selected text as:  → Greek > OK
```
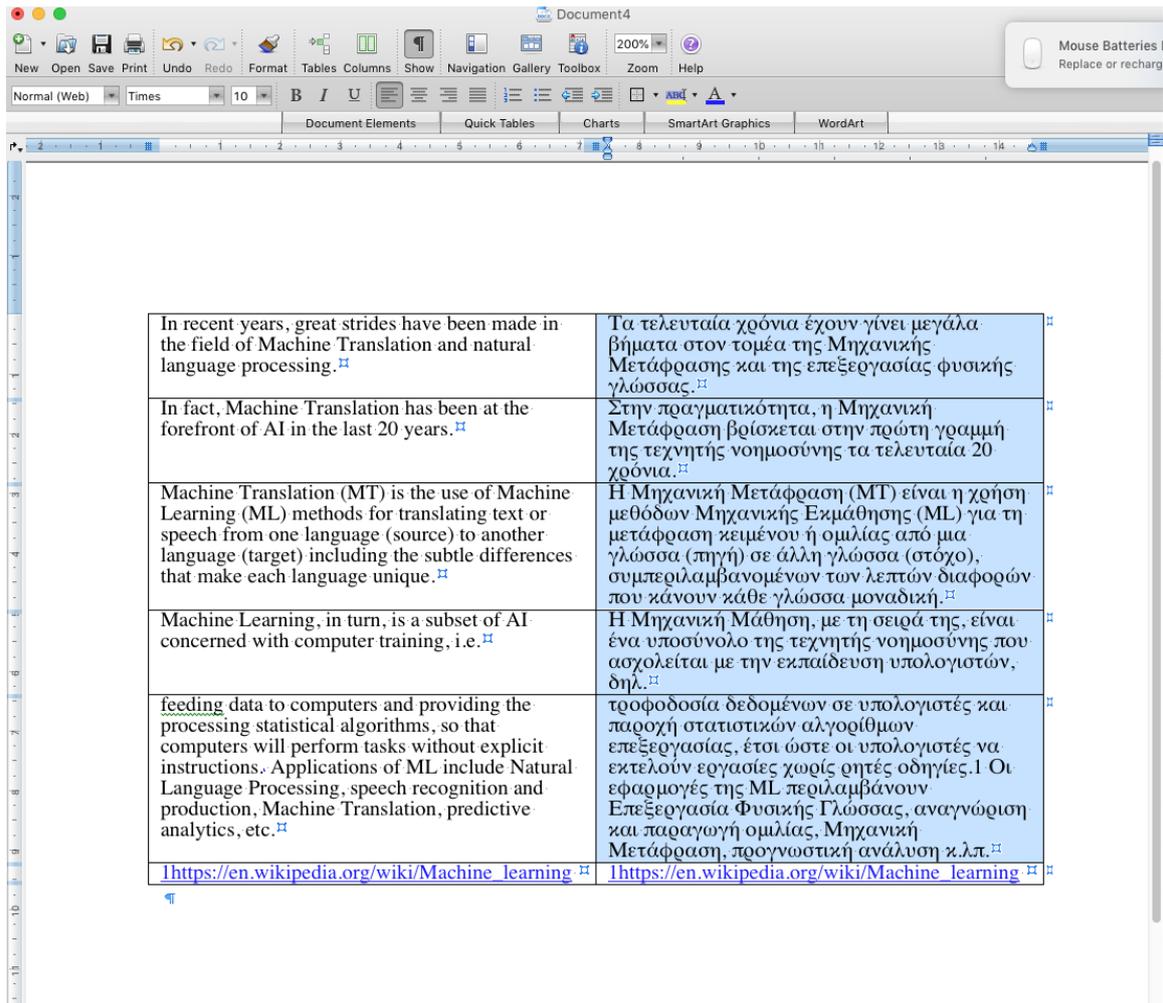
Figure 8: The bilingual text after setting the language of the right column to Greek.

Select the left column and delete it

    Table > Delete columns

Convert the table to text

    Table > Convert Table to Text → Separate with Paragraph marks

and deselect the text (click outside the text).
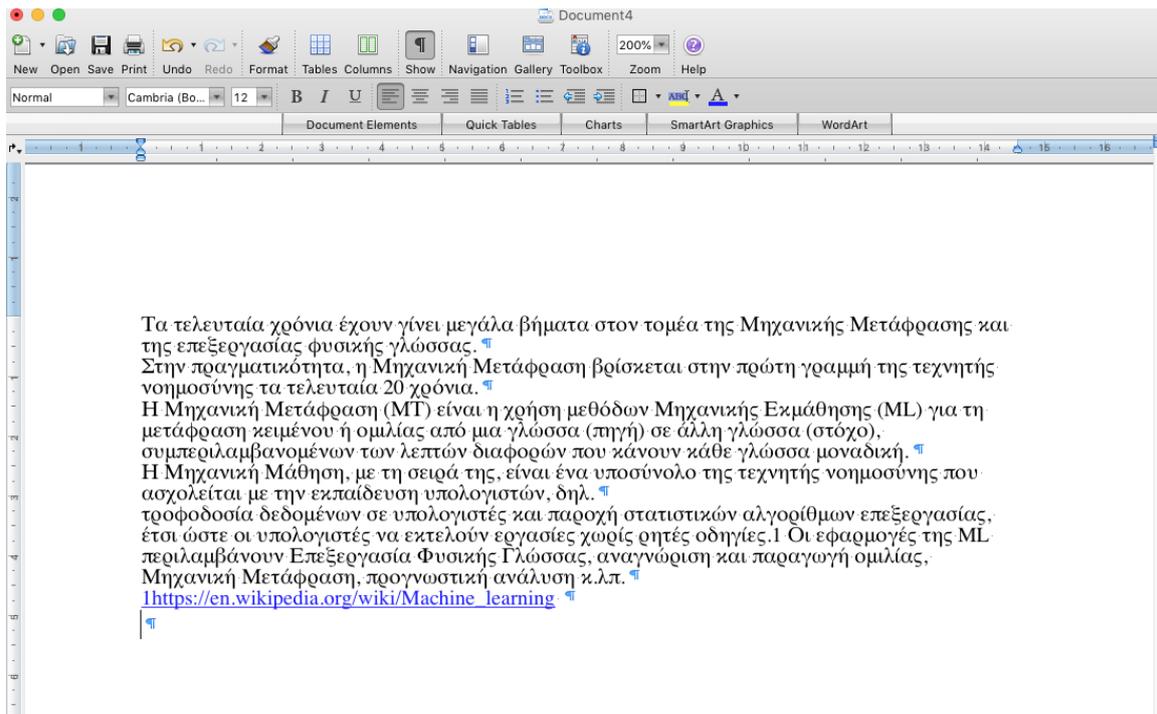
Figure 9: The translation converted to free text format.

Webpages

Download and install any translation browser add-ons, extensions, plugins, etc.

Depending on the browser, there may be add-ons that provide translations from multiple engines for comparison.

Tip: For selecting the most appropriate add-on, consider the following: a) does it provide translation from and to the languages of interest, b) translation engine(s) used[40], c) the number of users or downloads; be cautious about too few users or downloads, and d) user comments and ratings; usually more "stars" is better.

To translate the text, select the text on the webpage, right click and select Translate.

The quality of the translation varies with the target language; for frequently spoken languages, such as Spanish, Italian, Portuguese, Chinese, etc the translation is pretty good. However, do not trust the computer and always check the translation to make any required amendments or improvements.

Run a QA/QC on the translation output similar to the one above for Document translation.

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Speech

To translate a speech in a desktop environment, make a recording of it first.

Convert the audio to text, using one of the many fee speech-to-text-converter tools.

Save the text in a document file format (.docx, .txt, ..odt, etc)

Use a similar procedure as the one used for Documents translation above.

Translation using smartphones

Alternatively, you can do speech translation on the fly, using your smartphone.

Go to App Store, download and install the free Google Translate app, which can translate speech, conversations, text, or camera images in 100+ language pair combinations. Other features of the app include listening to the source text and the translation, copy and share the translated text, etc.

Benchmarking

To test the Google Translate app, we dictated the text

> *Welcome back my friends*
> *to the show that never ends*
> *We're so glad you could attend*
> *Come inside, come inside*
>
> ELP; Karn Evil 9, 1st Impression, Part 1

to the Google translate free app downloaded from the App Store, installed on an iPhone 15, and we requested an English to Greek translation. The app transcribed flawlessly all words dictated, but transcription quality may vary depending on individual pronunciation.

The translation result was "thumbs up", meaning that the gist of the above verse was clearly understood in Greek and did not require any interventions to improve clarity.

We then asked the app to back translate its own Greek translation to English. The back-translated text was about 65% similar to the source English text. This is not a very good rating, but this is as good as it gets for this kind of benchmarking. It is not certain whether a bilingual human would do much better than that.

Learners are welcomed to experiment with translations and back translations in other language combinations.

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QA/QC

Do not be fooled by the seemingly good quality or the smooth appearance of the machine translated text.

Never accept any translation without checking for quality and consistency.[41]

When finished with the translation, use the Agritourism Glossary to double-check for correct terminology translation and translation consistency. Look out for errors such as translation inconsistencies, text duplication, transliteration, broken text segments, non-understandable phrases, disambiguation, terminology deviations, adaptation to the target language, etc.

From the above it is concluded that translation engines may accelerate translation, but they are not to be trusted or run unsupervised.

How to use the training material to support English learning

The training material developed for this English for Agritourism Self-Study Guide was based on PR4: TRAINING PACKAGE ON AGRITOURISM. All the questions and answers developed for PR5 used the material of PR4 plus the Agritourism Glossary, which was in turn developed based on PR4.

The objectives of the two PRs, however, are quite different and should not be confused.

PR4 objectives were to train people interested in developing agritourism-related soft skills and competences, such as communication, elements of a business plan, opportunities of business development, promotional, managerial and financial skills, and introductory language skills development.

PR5, on the other hand, focused exclusively in developing a Self-Study Guide for raising awareness in English language learning, and provide young learners with the tools and training material to improve their English skills, which are essential for any agritourism business. The necessity of improved English skills was verified and reinforced following numerous on-site visits to agritourism businesses in all countries represented in the TREASUREHUNT project consortium of partners (see Agritourism business survey, and Conclusions, above).

As it was stated above, English learning was defined as acquiring or improving the Listening, Speaking, Reading, Writing and Vocabulary Skills (see The 4+1 linguistic skills, above). Therefore, the answer should include customized ways to use the training material for the 4+1 language skills.

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Human resources

Learning coaches

For the purposes of the TREASUREHUNT project self-study guide, the term learning coaches will collectively refer to teachers, instructors, educators, mentors, tutors, etc. and any other person responsible for sharing knowledge with learners. All of the above terms are used interchangeably, although there has been an effort to keep consistency. In turn, the term learner is used interchangeably with the term student.

The mission of learning coaches is to motivate learners and make fine adjustments in the learning process so each learner will maximize learning performance and success. Learning coaches will always be available for learner advising.[42] Learning coaches will be mainly involved a) in the beginning of the course to discuss the timetable and deadlines in cooperation with learners, b) to make sure that learners adhere to their study plan and deliver the set landmarks, c) in providing feedback on leaner progress and quality of work, and d) suggesting ways to catch up in case of deviations from the learning schedule.

In the beginning of the course, learning coaches will cooperate with individual learners in drawing up a customized learning plan. From then on, learning coaches will assist each learner to keep the plan throughout the course (see How to use the training material to support English learning, above).

Learning coaches will be responsible for selecting the parts of the learning timetable, the training material to focus on, for developing general study guidelines and tools, for preparing the self-assessment and evaluation tests, and for providing the grading procedure used at the evaluation stage.

Learners

Learners will act as teachers of themselves; they will prepare a study plan and proceed with studying and practicing.

In a self-study environment, learners do not have to be physically present in class and they can work remotely from their own study environment. It is possible that learners will appear in school the first day to discuss with their learning coach, and will study remotely from home.

Some learners may select a library study room, but this could be a challenging situation for language study involving audio playback, listening and speaking parts. On the other hand, a library study room may be a great venue for group learning and practice.

Unlike a traditional learning environment, where a syllabus applies to all learners in a class, and a teacher delivers often theoretical and boring lectures, learners are actively involved in designing and implementing their own learning plan and keep track of their own progress: depending on their workload of daily chores, learners draw up their own learning schedule within the provided period of 13 weeks for a 3-credit course, set deadlines by task, select when to study what, discuss

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and refine it by themselves or with their learning coach, implement it and take self-assessment tests. In this way, learners take ownership of their learning path, and thus are highly motivated to complete it effectively and on-time.

Throughout the learning period, learners may consult with the learning coach about learning topics, methods, tools, resources, activities, learning weaknesses, remedial action, etc.

After completing their studying, and whenever they think they have reached a good level of experience in the specific learning task, learners will have a chance to self-assess their performance and identify weak points that need further work. The self-assessment stage, implemented by playing the TREASUREHUNT Educational Games (https://treasurehunt-games.oikothesis.org/), can be repeated at will.

Tools, tips & tricks

Hot Potatoes suite for interactive exercises

Follow the British Council recommendations[43] and develop interactive activities, review sessions, quizzes, etc. to enhance listening, speaking, reading and creative writing skills.

Hot Potatoes[44] is a freeware considered by many as the golden standard for making interactive exercises.[45]

Hot Potatoes is a suite of six applications, JQuiz, JMix, JMatch, JCross, JCloze and The Masher, enabling users to create multiple choice questions, fill-in-the-blanks, mixed-up sentences, matching/ordering and short answers.[46]

1. *JQuiz* enables question-based exercises, such as True or False, Multiple choice questions, short-answer questions, hybrid questions and multi-select questions.

2. *JMix* enables jumbled or shuffled-word-in-a-sentence or letters-in-a-word questions.

3. *JMatch* enables match-type exercises; in other words a list of items appears on one side of the screen and a list of possible answers appears on the opposite side. Learners have to match one item on the one side with one item on the opposite side.

4. *Jcross* enables users to make crossword puzzles.

5. *JCloze* enables fill-in-the-blanks exercises. Learners complete all answers before checking. Clues and hints can be included, but using any of them will negatively affect the scoring.

6. The *Masher* enables building linked units of material; for example, a series of Hot Potatoes exercises can be added together to make a single testing set.

A minor drawback is that Hot Potatoes currently runs only on Windows and Mac is not supported. The html output, however, can be used directly on either platform, and anywhere on the World Wide Web.

Download Hot Potatoes from http://hotpot.uvic.ca/index.php#downloads and make your first Hot Potatoes test in 2-minutes or less (https://hotpot.uvic.ca/wintutor7/tutorial.htm # Hot Potatoes 7 Tutorial).

Spaced repetition

See "Spaced repetition software", on p. 60 of [47]

Flashcards

See "How to make effective flashcards", on p. 59 of 47, and

Anki

See "Anki", on p. 61 of 47

How to make your own spaced repetition exercises

See "Construct a deck of cards for studying", on p. 61 of 47

Language learning utilities

For a more detailed list of language learning utilities, refer to Appendix 2 – Language learning utilities, above.

Prepare for study

What is your learning style? Are you a "visual" or an "auditory" learner? A morning or an evening person?

Find your study place

Find a quiet place free from distractions, where you will have exclusive access rights.[48]

Be ware, though; some new findings contradict old wisdom; for example, alternating the study room may improve retention.[49]

Set you SMART goals

(Specific, Measurable, Attainable, Relevant, Time-bound)

Suppose, for example, that an aspiring agritourism entrepreneur wants to acquire a good knowledge of the agritourism terminology. The entrepreneur does his/her thorough search and discovers the TREASUREHUNT project Vocabulary application (treasurehuntproject.oikothesis.org), which is comprised of about 595 English terms translated into five languages.

The entrepreneur sets the following SMART goals for himself/herself:

> *"Within the next three months, I will have learned the 595 agritourism terms of the TREASUREHUNT glossary."*

At first sight, the plan seems compliant with the SMART goals.

- It is **S**pecific because it refers to a specific source material, the TREASUREHUNT agritourism glossary.

- It is **M**easurable because it talks about a specific number of agritourism terms (595).

- It is **A**ttainable (doable) because it specifies that within about 100 days (about three calendar months), the entrepreneur will have learned 595 terms, or about 6 new terms per day, which seems like a manageable task.

- It is **R**elevant because the TREASUREHUNT glossary contains agritourism terms that the entrepreneur wants to master before staring his/her business, and

- It is **T**ime-bound because it specified the 'next three months', and not just any three months from now to eternity.

Review/Revise your study goals

A closer look, however, might reveal several flaws and obscurities of the plan that need refinement:

1. When the entrepreneur/learner plans to learn 595 agritourism terms, in which of the six glossary languages (English, Bulgarian, Spanish, Swedish, Greek and Italian)? Which one of those language pair combinations does he/she want to learn? The default pair is English <–> native language, but which of the two pairs does he/she actually have in mind? English -> native language or native language -> English? Or both?

2. What exactly does the entrepreneur/learner want to learn? Pronunciation (in English only), term translation from or to his/her native language, spelling, use in a sentence, definition (in English only) or something else?

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European agritourism

3. The specific plan talks about the next three months. When exactly are these three months? Has any provision been made for holidays, vacation or other non-business days over these months?

4. Within any period of three months, there about 12 weekends (Saturdays and Sundays) or a total of 24 days, which is close to one calendar month. Will the learner be working on weekends too? Because if the learner does not plan to do so, there are only about 66 working days left to learn the 595 terms. In other words, learners will have to learn about 10 new words per day, which is almost double the initial workload of learning 5-6 new words per day.

5. What does the learner mean by '*have learned*'? How will the learner measure success and retention? By number of terms remembered? After how many days? Because it is well known that memory fades quickly. Namely, it is possible that at the end of the three months, the learner does not remember many of agritourism terms learned at the start of the process. So, how many terms should the learner remember after 5, 10, 15, 30 or 90 days? Or six years?

6. Define success rate. What is the End point? What does success mean for the learner? What is the retention rate after a specific number of days? How many terms should the learner be able to recognize, translate, pronounce, write down or use in a sentence at the end of the three months? Or after one week?

7. How will learners accomplish the goal? Which methods and tools will they use?[50] How do they plan to eliminate distractions and stay focused? How often and which tools will the learner use to monitor progress? Does the learner have any contingency plans (Plan B) in case something goes wrong? For instance, how will the learner deal with missed days of learning? Or what will the learner do to review and recall learned words and restore memory?

8. How many hours per day will the learner be working on learning the 595 agritourism terms? When during the day will these hours be? Will learning be full-time or part-time due to other work, family, other obligations, chores, etc. the learner will be doing on a daily basis? These are stress factors on the learner and may take a toll on learning.

All of the above issues, and possibly more, need to be addressed and answers given before even starting the learning process. Obviously, the plan will need to be refined and even more questions may result from the revision process. It is time well spent and worth the investment. The more thorough the learning plan will be, the smoother and more effective the learning process will be. The self-study plan review, however, should not become an overwhelming objective or an excuse for procrastination, and the learning action should start as soon as possible after the revision process.

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Table 2: Educational Games by linguistic skill.

Skill	Scope	Usage	Game	Learning objectives	Learner action	How it supports the learning objectives
LISTENING	Listen and understand standard native English spoken language	Be a good listener	Connections	Ear training	Listen to a term and drag and drop it next to its written form	Provides ear training and improved capacity to distinguish sounds of individual terms and matching each sound with the written form of the term. Indirect association between spoken and written speech.
			Listen and fit	Listening & reading comprehension improvement	Listen to a term and drag and drop it in the appropriate sentence	Similar to "Connections" but requiring listening comprehension at the term level and deeper understanding on how to use the term in a sentence.

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Skill	Scope	Usage	Game	Learning objectives	Learner action	How it supports the learning objectives
			Listen Up	Listening & reading comprehension improvement	Listen to the full passage (no blanks) with breaks between sentences and read the corresponding text (with blanks) while listening. Fill-in the blanks from the terms in the dropdown menu	A more challenging variation of listening comprehension skills development; requires short-term training and connection between text and audio at the sentence level. Learners must listen to the audio recording of the text segment and identify each word and its position; simultaneously, read the text, recognize the words, identify the missing term(s), and fill in the blanks from the dropdown menu.
SPEAKING	Express themselves clearly through	Storytelling	Sounds similar?	Learning reinforcement and retention by association between sounds (pronunciation) of known words.	Find the homophone or rhyming word	No audio reference material provided. Learners must recall each term pronunciation from memory and look for sound similarity with either the entire (homophone) or the ending (rhyming) of the proposed answers.

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Skill	Scope	Usage	Game	Learning objectives	Learner action	How it supports the learning objectives
	spoken language, able to keep a conversation		Rhyming words	Associate sound of question term ending with endings of proposed answers.	Find the word with similar sounding ending	Similar to previous game ("Sounds similar?)"; focused on rhyming words due to scarcity of homophones. Learners must look for sound similarity between question term and proposed answers (rhyming) endings. Slightly more challenging than "Sounds similar?" because learners must focus on the ending and ignore the first part of proposed answers. Positive learning reinforcement and retention by association between sounding (pronunciation) of question term with sounding of known words endings.
			Spot the not	Find difference in question term ending pronunciation with ending pronunciation of words proposed as possible answers.	Find the word that does NOT have a similar sounding ending.	No audio provided; learners recall the pronunciation of each possible answer from memory and contrast it with the question term to identify dissimilarity. Learning by differentiating (negative association) pronunciation of question term ending from endings of known words.

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Skill	Scope	Usage	Game	Learning objectives	Learner action	How it supports the learning objectives
READING	Read and comprehend text that is not too technical	RTFM	Letter soup or Letter spill	Reading fluency and comprehension improvement and the individual term level	Put the letters in the correct order to form a term	Learners must have studied the training material and become familiar with the terms of the agritourism glossary to the point where they should recognize immediately any jumbled term. The provided term definition gives a solid clue to the correct answer, therefore, making it easier for well prepared learners. If this in not helpful enough, learners may request a "Hint" to find out the next correct letter; if this is not helpful enough, iterate to the point where the learner can form the entire question term. Eventually, there is the "brut force" method, where learners apply all possible combinations of letters until they reach the answer. This, however, may work for short words, but it fails for longer words (more letters).
			Word detective	Reading comprehension improvement at the sentence level	Put the words in the correct order to form a sentence	Similar to "Letter soup" but one level higher. Learners must be well prepared to make sentences from randomly ordered words. Help is provided by "Hints" that will give the next correct word. For a perfect score, all words must be used. Experienced English language users (probably at a higher level than the CEFR B1/B2) can be assisted from the Subject-Verb-Object structure in English. As a result, a verb can never be the first word in a sentence. In the easier versions of the Game, the first word of the sentence might be capitalized, or the ending word might have sentence ending punctuation, or punctuation may be used as a sentence separation clue. The overriding strategy, however, is to try to comprehend the intended meaning, and start experimenting with word order before giving up and asking for help.

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Skill	Scope	Usage	Game	Learning objectives	Learner action	How it supports the learning objectives
			CluesO	Improved reading comprehension at the paragraph level demonstrated by answering text-specific questions	Learners read the text and use the clues provided to answer the multiple choice questions, including True/False questions	The reading text remains on display in the left pane of the screen, so learners can always have access to it. This Educational Game tests deeper learner understanding by asking specific questions to the provided text. Although it is possible for less well prepared learners to do well on CluesO, well prepared learners will have a clear advantage over less well prepared ones. There are no Hints or any other Help provided, except trial and error.
			Scripting	Reading comprehension demonstrated by piecing together text segments to make a short story	Put the segments in the correct order to make a short story	Click on each segment to put it in the correct order. Not all segments are shown on screen at all times as in the CluesO Game. In other words, some segments may appear only after a displayed segment has been put in the correct order. This keeps the display uncluttered and makes text sequencing easier. Same help features as in "Word detective" above, but at the segment level. Learner success on the Game does not depend on text memorization, but on understanding the method of putting segments together to form a meaningful story.

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Skill	Scope	Usage	Game	Learning objectives	Learner action	How it supports the learning objectives
WRITING	Express themselves clearly in writing, emails, announcements, etc	5W + 1H[51]	Spelling bee	Listen and spell	Click to listen to the audio and spell the word	Spelling bee is a popular word game and competition for assessing learner skills for correct spelling of words. Sometimes it is used as an alternative method of vocabulary learning instead of flashcards (see below). Vocabulary skills, however, are different in that they demand learning various aspects, such as the meaning, synonyms, definition and/or use of particular words in sentences. Of all these differences between the Spelling Bee game and Vocabulary skills, the scope of the TREASUREHUNT project Spelling Bee Game focuses on spelling. Spelling bee competitions can raise a lot of competitiveness among learners, and thus the Game might be used to liven up a lackluster class performance or learner interest. In contrast to the US, Spelling Bee games have not taken up in Canada or the UK.[52] Since the TREASUREHUNT project was designed as a self-study course, the current implementation of Spelling Bee is the best available for remote learning of limited social interaction learning settings.

Skill	Scope	Usage	Game	Learning objectives	Learner action	How it supports the learning objectives
			Word safari	Spelling skills & Reading comprehension improvement	Fill-in the blanks by typing in the missing words	Minimum information (no clues or definitions) and thus one of the most challenging games of the TREASUREHUNT project. It is probably a guessing game that can become frustrating, unless learners are extremely well prepared and have a thorough familiarity with the content. Memorizing the text of PR4 would be helpful if feasible, but not essential. Help is available as "Hints" (reveal the next letter). It is recommended that learners having difficulties take a number of guesses before asking for a Hint. Learners must type in their answers, instead of selecting from a dropdown menu, as in Listen Up above, to assess their spelling as well as their reading comprehension skills.
			Note taking	Spelling & listening comprehension skills	Fill-in the blanks by typing the segment played back by the audio recording	The Note Taking Game requires high quality spelling & listening skills, as there is no help or hint whatsoever, and seeks to improve these skills. In the Note Taking Game as applied to the TREASUREHUNT project, the audio recordings have substituted for the educator reading the text. Note Taking is a more general Educational Game than Spelling Bee and is not limited to the 595 agritourism vocabulary terms. This expansion to words beyond the agritourirm glossary was necessary to avoid overspecialization, as learners will need to use more words to communicate in writing with customers and partners alike during their regular business activities. Like all Educational Games, Note Taking provides a sandbox for learner listening and spelling skills quantitative improvement to reach the set goals before proceeding to the Evaluation test.

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Skill	Scope	Usage	Game	Learning objectives	Learner action	How it supports the learning objectives
VOCABULARY [53]	Master and use the 595 agritourism terms effectively, Web search	Web search	Term ID	Vocabulary skills improvement by reverse term identification (by its definition)	Drag and drop the definition next to the corresponding term	The agritourism glossary developed for the TREASUREHUNT project contains a wealth of information, such as English term pronunciation and definition (in English), translation in the other five languages of the project, spelling (in English and other languages), etc. The Term ID Game aims to train learners in reverse term identification, which includes matching the definition with the term. This activity indicates a deeper understanding and better handling abilities of English language; this is the main reason that this type of exercise pertains to the 12th grade of English language school system.
			Lord of the Words	Boost vocabulary skills	Drag and drop each letter to the correct position to form a term	Another game of minimum support information (no Clues, only Hints) and thus maximum difficulty (a reason which lead to the name of "Lord of the Words" to show that some wizardry may be required). Assumes excellent vocabulary knowledge and ability to recognize the word even with the randomized order of letters. The good point is that this Game includes a limited number of Quizzes and each Quiz includes only one answer; that is to say, there is no randomized order of alternative answers stored in a database for each Quiz. Once the learner has solved one Quiz, the answer to that Quiz will always be the same; thus, the learner can improve answer retention through spaced repetition.

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Skill	Scope	Usage	Game	Learning objectives	Learner action	How it supports the learning objectives
			Matchmaker	Enhance vocabulary & reading comprehension skills	Fill-in the blanks by selecting the appropriate term from the dropdown menu	Similar action to the "Listen Up" Game, but without the audio cues from that. No typing is required, as this Game does not test writing (spelling) skills. Each term from the dropdown menu is used once, and there are no redundant (unused) terms; this is a design specification to make the Game easier. A person with near-native English language skills will probably do well on the Game even with limited studying of the Training Material.
			Crossword	Build vocabulary & reading comprehension	Solve the crossword puzzle	Crossword puzzles for the TREASUREHUNT project were generated using the terms of the agritourism glossary and the Hot Potatoes Jcross program. Similar concept to the Term ID Game above, but in addition to the term definition, a few indirect facilitators are provided, such as number of characters in the term, common letters with other terms at the crossing points, that serve as additional information for solving the crosswords puzzle, and as always click on a "Hint" to get the next letter of the term.

In the above Table, "term" in singular or in plural refers exclusively to any of the 595 terms of the agritourism glossary, whereas "word" refers collectively to any word of the English language.

All training material, text, questions and answers, etc amended or not are sourced from the Modules and Lessons of PR4: Training Package on Agritourism. Therefore, to be well prepared for the Educational Games, and practice for the Evaluation, learners must study actively, repeatedly, intensively and extensively the Modules and Lessons of PR4.

*The learning principle behind the Educational Games is "**practice makes perfect**", especially when practice is combined with a little fun, such as the one provided by the Games. Thus, it is recommended that learners follow a spaced-repetition scheme as memory refresher for all of the above Educational Games.*

It is highly unlikely that learners who have not studied the Training Material and exercised with the Educational Games will perform well on any Game by chance alone.

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Skill	Scope	Usage	Game	Learning objectives	Learner action	How it supports the learning objectives
The didactic value of the above Educational Games is verified by the fact that various global leaders of English language testing services have similar games on their websites. For example, the "Word detective" game (put the words in the correct order to form a sentence) is endorsed by the American English service of the US State Department that has posted an identical game on its website (https://americanenglish.state.gov/files/ae/out_of_order_answer_sheet.pdf)						

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Daily study plan

Although learners are encouraged to develop their own study plan, the self-paced environment and consequently the limited role of educators may build pressure to complete the assignments on-time and thus affect progress negatively.

For this reason, a sample day by hour by skill study plan is provided below assuming a 5-workday week. Study hours are 45-minute long sessions followed by 5-10 minute breaks. Learners are welcome to modify the plan to suit their needs, learning habits and their other professional activities or commitments.

Table 3: Example of a daily study plan [54]

Skill	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (Review session)
Listening	Make a recording of a chunk of TREASUREHUNT text and listen to it. Repeat as needed.	Listen to yesterday's recording. Listen to an audiobook for ... minutes. Repeat as needed.	Make a recording of a new chunk of TREASUREHUNT text and listen to it. Repeat as needed.	Make a recording of a TREASUREHUNT Case Study and listen to it. Repeat as needed.	Listen to a TED talk on agritourism/sustainable tourism. Repeat as needed.	Review (playback) all audio material studied. Play the Listening Skills Educational Games for the study Lesson.
Speaking	Read aloud the study chunk. Select another chunk and read it.	Speak alone about what you have learned yesterday. OK to peek at notes. Speak with a friend for 10 minutes.	Prepare a 3-5 minute mockup Powerpoint presentation of the study chunk. Present it "in class". OK to peek at notes/slides. Record your presentation. Happy with the result?	Prepare a 3-5 minute mockup Powerpoint presentation of the Case Study. Present it "in class". OK to peek at notes/slides. Record your presentation. Happy with the result?	Speak with a friend or someone you don't know well for 30 minutes (e.g., someone from another country). If none is available, try to speak with an AI, such as ChatGPT.[55] Use your smartphone IPA (e.g. Siri or Alexa) to have a conversation on a topic you	Review all the material studied. Play the Educational Games for Speaking Skills

Skill	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (Review session)
					are interested in.	
Reading	Read silently the study chunk while playing the recording. Progressively, eliminate the playback and read it aloud.	Read yesterday's chunk. Read a TREASUREHUNT Case Study from the study Lesson.	Read silently the study chunk with recording playback. Progressively, turn down the volume and read the chunk aloud.	Read silently the Case Study with recording playback. Progressively, turn down the volume and read the Case Study aloud.	Read the TED Talk transcript (see below). Practice reading. Record the transcript and playback. Happy with your reading?	Review all the material studied. Play the Reading Skills Educational Games for the study Lesson.
Writing	Copy 1-2 paragraphs to get used to English spelling. Transcribe the recording made in Listening above. No peeking at the original text.	Write a summary of the study chunk. Check it with the spellchecker and the grammar tool of your word processor. Write a paragraph about your favorite movie.	Read and write (Copy) 1-2 paragraphs of the Lesson to get used to English spelling and to train your handwriting.	Write a summary of the Case Study. Check it with the spellchecker and the grammar tool of your word processor. Write a paragraph in English about your favorite football team. or pet or flower or food.	Transcribe the TED talk. No subtitle peeking. Use the subtitling option after your finish for checking your transcript. Translate the transcript to your native language.	Review all the material studied. Play the Writing Skills Educational Games for the study Lesson.
Vocabulary	Use Anki to learn 10 new words and use them in sentences.	Run Anki to check how many of yesterday's words you can remember. Learn 10 new words and use them in sentences.	Run Anki to check how many of yesterday's words you can remember. Learn 10 new words and use them in sentences.	Run Anki to check how many of yesterday's words you can remember. Learn 10 new words and use them in sentences.	Run Anki to check how many of yesterday's words you can remember. Learn 10 new words and use them in sentences.	Run Anki to check how many of the 50 words you can remember. Play the Vocabulary Skills Educational Games for the study Lesson.

Study

Refer to the Start Learning section of PR4: A TRAINING PACKAGE ON AGRITOURISM, p. 137.

How to study

<div align="center">To learn English, teach English to yourself and others (!!!)</div>

But first, teach yourself English.

For tips on good study techniques, habits, practices, tools, effective learning, etc. visit [56]

Cramming the night before the exam may help studying, but should not become a self-fulfilling prophecy. Studying is like packing a suitcase[57]: if the clothes are packed neatly, the suitcase can carry them nicely time after time; hasty-packing, however, will load the clothes for a while, but they will start falling off quite fast. It takes time to learn how to fold and put clothes nicely inside the suitcase. Similarly, the brain needs some to assimilate the information and to retrieve it when asked to do so, and gaining the experience of doing the whole thing. Consequently, learners should take their time to neatly arrange their study efforts and knowledge in coherent groups.

The Feynman technique

The Feynman technique[58] is the concept

<div align="center">"*If you can't explain something in simple words, then you don't understand it*".</div>

To put it simply,

<div align="center">**Be your own teacher**</div>

It is also known as "learning by teaching" and has been implemented as flipped-classroom. Essentially, it is a role-reversal technique in which Learners play the role of the teacher, after studying the training material and then presenting it to other learners.

The method was invented in Germany, but its application met resistance originally, due to the strict disciplinarian German educational system requiring rote memorization (See spaced repetition below). By the 1990s, however, the German educational system realized the benefits the method has to offer, and mainly that it eliminates the generation gap, and thus brings teachers and Learners closer together.

It has been found that "learning by teaching" is much more effective if the lecturing learner teaches an inanimate object, such as a rubber ducky or a plastic platypus.

The Feynman technique is summarized in four steps:

1. Research about a topic and study it

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2. Try to teach it to someone else

3. Fill in the holes in your knowledge

4. Review what you have learned and make your teaching easier to understand

As such, the Feynman technique is a modification of the Learning by Teaching technique in the respect that there may be no Learners to teach. Learners become familiar with the training material, and then flip their roles to teach themselves what they probably already know. The added benefit of the role flipping is that learners will solidify their knowledge and will transfer it to their peers in a way that they can understand.

Due to the above benefits, it is recommended that TreasureHunt project learners use the Feynman technique for each one of the 4+1 linguistic skills to be mastered.

Get some more help on How to Study[59]

The study flow chart

The following study flow chart provides an outline of the steps in the study process.

Studying includes all training material, as mentioned in The TREASUREHUNT project training material, above.

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PR4 TRAINING MATERIAL & GLOSSARY
STUDY FLOW CHART
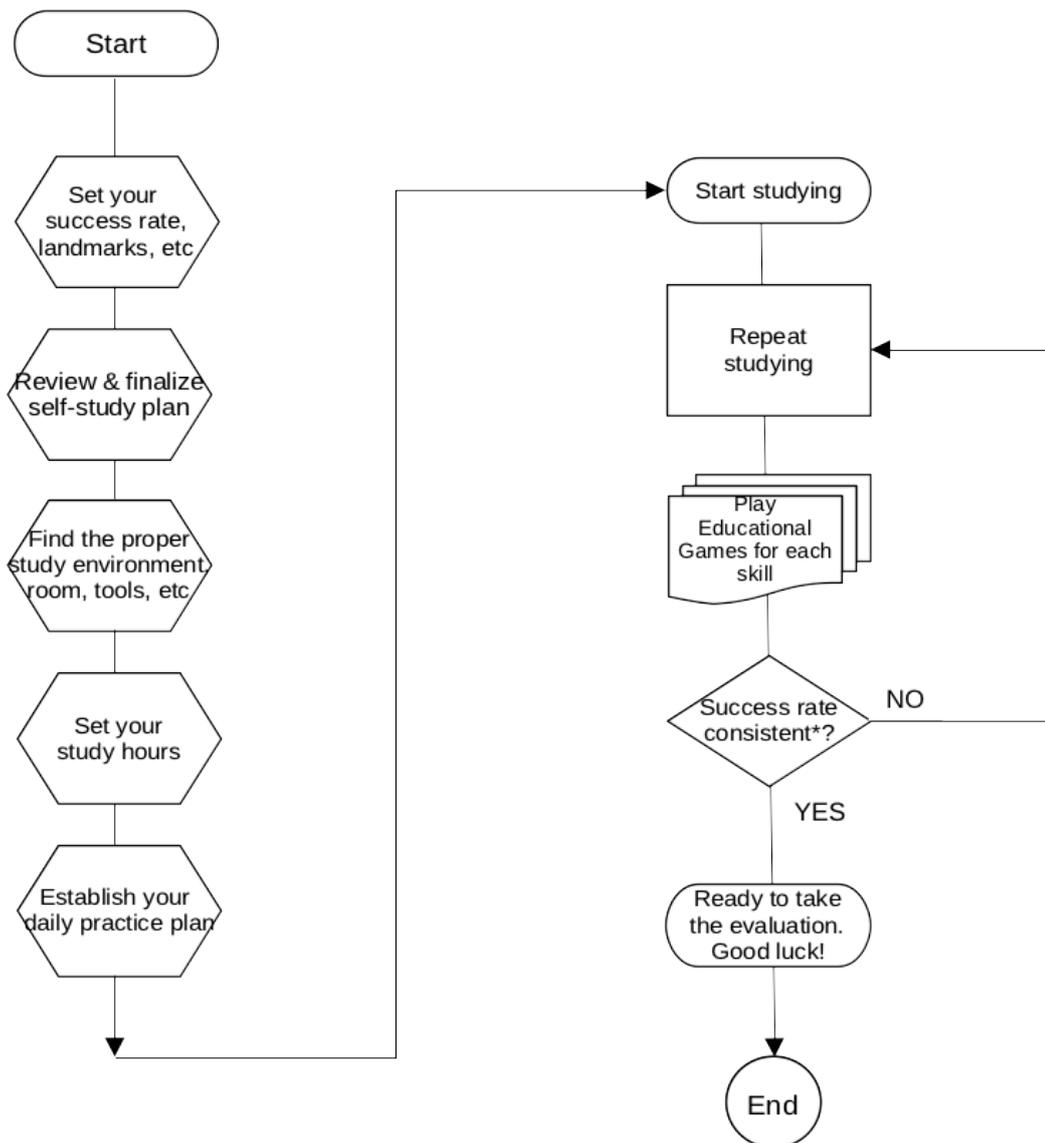
Figure 10: Generalized study flow chart for the PR4 training material and the glossary.

The left half of the flow chart is flexible, and tasks can be moved up or down without hurting study efficiency. For example, the task "Set your study hours" can be moved at the beginning, right after "Start" and all other tasks moved one step down.

* Consistent success rate is defined as scores above the set success rate for n=4 test repetitions of each of the 4+1 linguistic skills. Average test scores should be avoided because they allow for some scores to be below the set success rate, and thus do not guarantee consistency and success. For better retention results, test repetitions should be spaced 3-4 days apart.

Start learning

Refer to Start Learning in PR4: TRAINING PACKAGE ON AGRITOURISM, p. 137.

Increase your productivity

You may use the screen time facility of your iPhone and check how much time you spend visiting various websites, etc.

Motivation fill up

Always ask yourself the question first: Why do I **really** want to do this?

Figure 11: Motivation is the only way to do great things

See Motivation section and "How to motivate a prospective agritourism entrepreneur to learn English", in PR4: TRAINING PACKAGE ON AGRITOURISM, p. 132 and p. 133.

Chunking

Break content into manageable-size learning chunks to facilitate understanding and memory improvement. A chunk is the minimum autonomous learning unit. The size of the chunks is a matter of trial-and-error, but definitely not sentence-by-sentence.

For example, the PR4: A TRAINING PACKAGE FOR AGRITOURISM has already been split to six Modules and three Lessons per Module. Each Lesson follows a common pattern with headrings, subheadings, paragraphs within headings, etc (see PR4 – Training package on agritourism, above). Learners are free to start their learning process at any size chunks. With time and practice, however, the size of the chunks will stabilize and may reach a page, with room to increase even more.

Chunk your time too. It has been said that average human attention span for light audiovisual material (TV shows) is about 8 minutes. Therefore, any information delivered beyond the 8-minute threshold will result in cognitive overloading and thus forgotten.[60] With time and practice, however, the 8-minute span can increase to 25-30 minutes.[61] Split study time into 8-minute chunks and see how much information you can process and retain.

Learning will be more efficacious when:

1. It occurs in small chunks designed to build upon each other, and

2. Those series of chunks build upon each other by calling into use material learned in earlier chunks, providing both repetition and association opportunities. In other words, chunks must be somehow related to each other to promote learning.

The core meaning of chunking applied to learning is:

>*As firewood burns faster if it is split into smaller pieces,*
>
>*learning will be faster if it is broken into smaller chunks.*

And

>*The smaller the pieces, the faster the burning.*

However, endless splitting can be confusing; human mind tends to form associations of seemingly unconnected information into meaningful groups, such as individual, meaningless letters, grouped into larger, meaningful groups, such as words, grouped into higher pieces, such as sentences, paragraphs, chapters, etc.[62]

Chunking might be as easy as creating a series of bullet points or steps[63] and devising the mnemonics to store it in long-term memory, or making connections and association with other

memory strategies.[64] Creating chunks of meaningful sets of information recalled together reduces the amount of information that the individual must retain.[65] A typical example of chunking combined with mnemonics is the memorization of the Periodic Table of Elements.

For an example of how to use chunking in class, see [66]

Active learning

As a last resort, if chunking doesn't help and you have available time, employ active learning! Meaning, try to develop a deeper understanding of how it works, a way of connecting the pieces of the puzzle through meaningful or weird or funny arguments, sentences, statements, words, pictures, jokes, etc. Take a look at Appendix 6 – How to make the Educational Games, below.

Fight procrastination

Get rid of distractions. Clean up your desk, put your cell phone in silent mode to another room, close your browser so you don't wander reading the news or your favorite webpage or social media; for example, install the browser extension "Social Fixer for Facebook", close your email account, access to social media, etc.

Download and install the Self Control[67] free and open source app to eliminate all distracting website access while studying (Mac only) or FocalFilter[68] for Windows.

Time management

Learners are urged to use the Pomodoro technique[69], a particularly effective method for dealing with repetitive everyday language learning tasks. The foundation of the Pomodoro technique is the premise that users gain learning momentum by following a fixed time schedule of study bouts with short breaks between bouts.

Start with a 25/5 time frame (25-minute study, 5-minute break), move progressively to 45/15, and once you have built momentum to perhaps 50/10.

Breaks are even more important than the study periods! Never skip breaks, even if you have reached study periods near or over one hour. It is the time out the brain needs to get away from the problem, relax, regroup and make a strong come back!

Experiment with the study-break periods of the session to find what works best for you. [70]

You might be tempted to use your smartphone stopwatch to keep the time. Don't do it. It may seems easier, but learners will be too much distracted by their smartphone and they would miss the point.

Get a cheap kitchen timer and set the bell to ring at the right time.

Amazing and effective working technique!

Try not to go over the scheduled number of study hours per day. If you do, your energy levels might be reduced the next day.

Learning management

Use a free application, such as Excel, Google Sheets or ProjectLibre[71] for project management.

The term Learning management refers to management for the entire learning project, including time monitoring, deliverable completion and remedial action, in contrast to the concept of Time management, which refers to management of hourly activities on a daily basis.

Flipped classroom

The flipped learning environment where learners become teachers of themselves. Covered mostly in The Feynman technique, above.

Productivity apps

Watch the video (https://www.youtube.com/watch?v=p-AMooYPO1Y)

Metacognitive skills

The study of your study patterns to learn how to learn. Refer to PR4: A TRAINING PACKAGE ON AGRITOURISM, p. 139

Evaluation standards

Self-assessment is a continuous process performed by learners following a completion of a manageable microtask, such as listening to or reading aloud one paragraph at time, etc.

Tests developed according to standardized tests of English for Specific Purposes (ESP) by:

US Department of State Bureau of Educational and Cultural Affairs

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[International English Language Testing System (IELTS)](#)
[Test of English as a Foreign Language (TOEFL)](#)
[Duolingo English Test (DET)](#)
[Cambridge Assessment English](#)
[Trinity College London](#)
[British Council](#)

Tips & tricks for test-taking

Listening

For some techniques and practice questions on how to take the IELTS Listening tests, visit
https://www.youtube.com/watch?v=6fk6W7Knld8

Speaking

For some tips on how to answer any IELTS speaking question, visit
https://www.youtube.com/watch?v=z_1BQVdQLoc

Reading

For some tips on how to answer IELTS reading questions, visit
https://www.youtube.com/watch?v=3KDP8P-pvEw

Writing

For some tips & rules for answering IELTS essay questions, visit
https://www.youtube.com/watch?v=yle3Wytf_LE, https://www.youtube.com/watch?v=yvt8RzGNhBc, etc.

Vocabulary

For some advice on how to answer IELTS vocabulary questions, visit
https://www.youtube.com/watch?v=ZfIIfV8DMuU

If everything else fails, try using brut force, i.e. testing different letter or word combinations to answer a question in the final exam. This system, however, may work for short words or sentences, but it will certainly fail for longer ones.

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References

American English
https://americanenglish.state.gov/
https://americanenglish.state.gov/four-skills-resources
https://americanenglish.state.gov/files/ae/teachers_guide_for_creating_lessons_with_moocs-508.pdf

English Language and Culture Blog
The Best English Speaking Apps in 2023
https://www.fluentu.com/blog/english/english-speaking-app

VOICE GENERATORS
How to Generate Your Own Voice - Text to Speech
https://www.youtube.com/watch?v=PzBdEW5WNGo

BEST AI Voice Generator | Eleven Labs
https://www.youtube.com/watch?v=seMNwAav55c

Best Voice Changer for PC | Speak using AI Voices
https://www.youtube.com/watch?v=lOmKuYMwjsk

For a more general list of links to specialized topics, consult PR4: TRAINING PACKAGE ON AGRITOURISM, p. 129

PART III – APPENDICES

Appendix 1 – Web searching

Perhaps the most important present day applications using English language is Web searching. To put it simply, Web searching opens up the entirety of human knowledge obtained through the centuries and makes it available to everyone. Regardless of whether some sources of information remain behind paywalls or they are open and freely available, the Web is like a multibillion volume, infinite space library, and growing by the second. Therefore, web searching is considered perhaps the No. 1 soft skill priority everybody should have and practice.

Web searching is based almost exclusively on keyword search. It is assisted by the 'type ahead' feature, which can predict the next one or more characters, and sometimes words to be entered. Search engines make grammar and syntax redundant: a set of keywords in the proper order will produce identical output with a full grammatically and syntactically correct sentence. Furthermore, web searching is oblivious to 'stopwords', that is common words that do not add significant information to the search string and, therefore, can be omitted.

Users can start a web search by carefully formulating the question in their native language. Verbs are indifferent and can be omitted. Therefore, the search should contain a selected few agritourism-specific keywords. Keyword order is not important, although it is advisable to keep keywords in a logical order.

Before getting into details for specific web searching, two general guidelines:

A) To find equivalent applications, enter:

```
alternative X
```

where X is the software your are looking for an equivalent.

For example, enter

```
alternative Microsoft Project
```

B) If you ever wan to get an idea or a list of the latest and greatest software applications, enter:

```
Top 20 free X software
```

where X is the type of software you are looking for. For example,

```
Top 20 free accounting software
```

The following is a short list of Quick Tips on how to do an effective web search.[72]

1. Formulate the question in your native language. In 1-2 sentences state precisely what you want to find from the Internet.

2. Translate the question into English; if you don't feel comfortable with your English language skills, use Google translate for a rough draft.

3. Identify keywords. These are usually nouns that have special importance for your search.

4. Consult an online dictionary to find synonyms of the keywords.

5. For agritourism-related keywords, consult the glossary (treasurehuntproject.oikothesis.org) to translate keywords from any of the five TREASUREHUNT project languages to English and vice-versa.

6. Use up 6 to 8 carefully selected keywords per query. Most searches use only 1-2 keywords and therefore yield too many and probably irrelevant results.

7. Omit articles ("a," "the"), pronouns ("he," "it"), conjunctions ("and," "or") or prepositions ("to," "from") in your queries.

8. Consider skipping verbs. If, however, you want to use an AI tool, refer to The art of AI prompts, below.

9. If you want the EXACT keyword combination, enclose it in quotation marks; for example, "digital marketing campaign", "farm stay", "farmers market", etc.

10. Spell carefully, and consider alternate spellings and synonyms.

11. Avoid redundant terms.

12. Customize your search using the Advanced Search option of your search engine.

Appendix 2 – Language learning utilities

Text-to-speech converters

There is a huge variety of text to speech converters with excellent quality results. All of them will have audio output so users can hear the sound of the text. A few will allow the audio to be exported and downloaded as an .mp3 file.

The following is a list with some suggestions.

Free tools

On Microsoft Word

Learners using Microsoft Word on Windows 10 can install the free Speak text-to-speak feature to read text aloud. For information, visit here[73].

Browser add-ins and extensions – no .mp3 export

TTS Text to Speech – Voice Reader Online

TTSReader – Text to Speech in Page Reader

Speechify – Text to Speech Voice Reader

Select and Speak – Text to Speech

NaturalReader – AI Text to Speech

Google Translate

Converter websites – with .mp3 export

https://ttsmaker.com/ - Good voice selection; maximum 10,000 characters – **RECOMMENDED**

https://ttsmp3.com/ - Selection of voice, speed, add breaks, etc.

https://www.text-to-speech.online/?ref=taaft&utm_source=taaft&utm_medium=referral – **RECOMMENDED**

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Local converters – with .mp3 export

Speakline - **RECOMMENDED**

A small, free, user friendly program for PC and Mac.

For Windows and Mac.

Download it from https://pcmacstore.com/en/app/441968334/speakline.

Click on the cogwheel to select voice and speed.

No word limits. Good quality audio export.

Copy & paste text, or import entire .txt or .rtf files.

Click "Play/Pause" to read or pause the text.

Export it as .aiff file.

Convert the .aiff file to .mp3 file using the free Audacity
(https://www.audacityteam.org/) or VLC media player
(https://www.videolan.org/) apps.

For a list of alternatives to Speakline, visit

https://speechify.com/product-reviews/alt/speakline/?
landing_url=https%3A%2F%2Fspeechify.com%2Fproduct-reviews%2Falt
%2Fspeakline%2F

Browser installed voice recording add-ins & extensions

To record text to voice, use the Voice Recorder app that comes with
Windows 10.

Visit https://www.youtube.com/watch?v=kfqpFKdDVMU for necessary
settings. The recording is in .m4a format; to convert it to .mp3,
use the Audacity free app.

Customize the installed add-in and select a UK English voice,
speaking speed and pitch, etc.; for example, in the TTS Text to
Speech – Voice Reader Online, a good combination of parameters is
Language/locale: All, Voice name: Karen, Average speed and pitch,
and Hotkeys to change Speakers: Google UK English.

A list of recommended apps for speaking by specific objective

https://www.fluentu.com/blog/english/english-speaking-app/

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Pronunciation tools

Google pronunciation tool

The Google pronunciation tool can be applied in two ways:

A) Enter "pronounce X", where X is the word of interest, and click OK. In the Pronunciation pane, select British pronunciation or American pronunciation, and click on the speaker icon (🔊) to listen to the word and watch the animated 'mouth' image for the position and opening of lips and tongue while pronouncing the word.

B) In the Google search box, click on the microphone icon (🎤) to speak the term. Watch whether Google comes up with the correct spelling. Read the feedback.

In your browser, enter "pronunciation X", where X is the word you want to know how to pronounce. Select between British and American pronunciation. Click on the "mouth" icon to hear the pronunciation.

Alternatively, in the Google search box click on the microphone icon (Search by voice) and speak to hear its pronunciation. Select British or American English.

Google Chrome extension

In Google Chrome install the "Pronounce: Speech and Pronunciation checker" extension.[74]

Sign in.

Click on "Read Aloud" and start reading a text segment. Unfortunately, there is no functionality of entering your own text.

Record the text by speaking to the internal microphone, and

Receive instant feedback by word, with suggestions on how to pronounce correctly any mispronounced word, as well as the words pronounced like a native!

Additional feedback on Clarity and Engagement

Repeat until you get the pronunciation right.

7-day free trial, then €7.52 per month.

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Appendix 3 – AI enhancements

Can AI be used in English as a second language learning?

Recent study by the British Council (ai_in_english_language_teaching_systematic_review.pdf (britishcouncil.org)

Exploring AI For Language Learning: Benefits, Challenges, And Future Trends (Exploring AI for Language Learning: Benefits, Challenges, and Future Trends - Dr. Language (drlanguage.org)), and

Artificial intelligence technologies and applications for language learning and teaching (Artificial intelligence technologies and applications for language learning and teaching (degruyter.com))

Consensus: In summary, AI enhances English Language Training & Learning (ELT/L) by adapting to individual needs, providing real-time feedback, and creating engaging learning experiences.

What Is ChatGPT & How Can It Be Used for Language Learning?

Visit https://www.youtube.com/watch?v=vHKCsrYkpNk, etc.[75] [76]

Each of the four major AI platforms (ChatGPT, Bard, Bing, Claude) offer speaking chat capabilities.

Use your smartphone to start and continue a conversation away from your desktop computer. The mobile app is called Bing on the App Store; other AI platforms include chatGPT, Bard and Claude.

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Nobody around to have a chit-chat with? Try a chatbot

The AI capabilities have completely transformed the traditional language learning.[77]

When there is nobody available to talk to, or for extremely introvert learners, a conversation with a chatbot may provide the best solution. Chatbots are not judgmental, and learners can request that the chatbot corrects their speaking mistakes.

For a list of AI chatbots, visit [78].

The best way to start a conversation with ChatGPT is to assign the role of a penpal to it[79]:

> *"Hello! Please be my penpal. Let's talk about…"*

or assign ChatGPT a role and ask it to play along:

> *"You are a digital marketing expert and I want to launch my agritourism startup to make money. What do you recommend?"*

or

> *"Please be my private English language tutor and let's start a conversation on ..."*

With the free Bing copilot installed on Microsoft's Edge browser, learners can have a conversation with a chatbot about any topic. Limit of 30 answers per session and 300 responses per day. Limits are reset daily.

Download and install on your smartphone or your desktop one of the four major AI platforms: OpenAI's ChatGPT, Google Bard, Microsoft Bing, Claude.

ChatGPT is perhaps the most appropriate AI for conversation with language learners.[80] Its major drawback is that it doesn't have built-in voice capabilities. It is very easy, however, to install voice control on ChatGPT.

Add voice control to ChatGPT

For a two-way voice conversation with a chatbot, voice control is required.[81]

In Chrome Web Store, add the extension "*Voice Control for ChatGPT*" to Google Chrome. Select the speed and UK or USA English.

To enter voice prompts, press the space bar anywhere on the screen.

Using smartphones, learners can speak to ChatGPT, but the AI tool does not have native speaking capabilities, and therefore will provide written answers. To enable ChatGPT voice capabilities, install the Chrome extension **ChatGPTVoice** or **ChatGPT MOD**.

Start a conversation

Learners could type the following prompts to start a conversation; in addition, they request that ChatGPT corrects each learner sentence before continuing the conversation:

> "You are an expert English teacher, and I am an intermediate English learner. Let's have a conversation in English where you correct my responses for any errors before continuing the conversation. You start."

ChatGPT can act weird. Sometimes it just corrects your sentence, but does't continue the conversation. Other times, it forgets to correct your sentence. To correct this inconsistency, give ChatGPT some structure and make it respond in a useful way. The following provides an example of how to start a conversation by describing what ChatGPT should do:

> "Play the role of my engaging, good-natured, motivational English teacher. Correct my English if I make a grammatical or other linguistic error and explain what the error was. After I send a message, and before correcting it, tell me what I said wrong and correct my English. Then in the next paragraph, jump straight into the conversation. Keep your answers to no more than 50 words. You start."

Or you can get more practical and have a conversation on Short situational dialogs on everyday topics. Visit [82] to get some more ideas.

Like a car in autopilot, ChatGPT can still make mistakes, so user attention at all times is advised. If ChatGPT continues to make mistakes despite a more strict description of the situation and requests, change the wording of the prompt into a more detailed

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one. In case of still not getting the expected results and before trying ChatGPT4, experiment with giving more or less details and which prompt format gives the right answer.

Keep practicing even after you have attained a good level.

Get help by listening to the pronunciation of the terms in the TreasureHunt Project glossary web or mobile apps.

B) Browser installed speech-to-text apps

Search the App Store, Google Play, and Microsoft Edge for Speech to Text apps, add-ons or extensions.

Many of these extensions are common or have equivalents for the three browsers.

Download and install the piece of software of your choice. Download the extension based on the number of downloads, positive reviews or rankings.

Alternatively, you can use the voice input software of your computer, such as Siri for MacOS, or note-taking app

Small talk

Consult and practice the "Dialogs for everyday use"

https://americanenglish.state.gov/resources/dialogs-everyday-use

Keep a conversation going

CAUTION: AI tools are usually very fast in answering prompts. Therefore, learners should be somehow prepared to hold a conversation; in other words, learners should have brainstormed with themselves and prepared a list of about 4-5 followup questions to AI tool answers. It is not important if these questions are not directly connected to the tool's responses. The main point is for the learner to start and keep up a conversation to improve his/her listening or reading comprehension skills.

Another interesting point learners may wish to experiment with is whether the AI tool will respond consistently to the same questions after a few days or whether different AI tools will yield similar responses.

Below are some examples of conversation subjects and things to talk about. These examples are indicative and learners are encouraged to supply their own input.

Add voice control to ChatGPT as explained above, and keep going.

On agritourism businesses

- What are the most effective strategies for starting a successful agritourism business?

- How can I secure funding for my agritourism business idea?

- What are the key factors to consider when choosing an agritourism farm location?

- How can I identify and target my ideal customer base for my agritourism business?

- What steps can I take to manage the finances of my agritourism business and stay profitable?

- How can I effectively market my agritourism business to attract new customers?

- Where should I market my agritourism business to grow my business?

- What are the best practices for managing and leading a team?

- How can I measure the success of my agritourism business and make necessary adjustments?

- What resources are available to support the growth and expansion of my agritourism business?

- How can I stay ahead of the agritourism industry trends and adapt to changes in the market?

On agritourism entrepreneurs

- As an entrepreneurial expert, what methods would you recommend I use to test the viability of my agritourism business startup?

- Can you suggest the top methods for securing funding for a new agritourism venture?

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- What marketing strategies would you recommend for someone looking to promote a new agritourism business?

- What advanced technologies, like industrial Chemistry, could an agritourism entrepreneur apply to increase business profit?

- What strategies would you recommend for someone looking to use crowdfunding to raise funds for their business?

- In which countries is the idea of agritourism appreciated most?

- Which people are more willing to spend money to visit agritourism installations in other countries?

- What steps would you recommend for someone looking to build a strong and effective team for their agritourism business?

- What cash flow management techniques would you recommend for someone starting a new agritourism business?

- As an entrepreneurship expert, what strategies would you recommend for someone looking to secure funding for a new agritourism business?

- What are the prospects of agritourism at a global scale?

- What are the prospects of starting a new agritourism business by EU country?

- What strategies would you recommend for entrepreneurs looking to scale their agritourism business and grow it to the next level?

- Can you suggest the top methods for networking and building relationships as an agritourism entrepreneur?

- What strategies would you recommend for a prospective agritourism entrepreneur looking to make a successful pitch to investors?

- What strategies would you recommend for someone dealing with competition in a new agritourism business?

- Should a prospective agritourism entrepreneur go cheap and low or wide and high?

- What risk management techniques would you recommend for entrepreneurs starting their new agritourism business?

- What steps would you recommend for entrepreneurs looking to pivot their agritourism businesses and adjust their strategy?

On environmental issues

- As an expert in environmentalism, what strategies have the greatest potential to reduce carbon emissions?

- As an expert in environmentalism, what are the top environmental challenges facing the world today?

- As an expert in environmentalism, what actions can individuals take to make an impact on climate change?

- As an expert in environmentalism, what renewable energy sources have the greatest potential for growth and adoption?

- As an expert in environmentalism, what measures can be taken to protect biodiversity and endangered species?

- As an expert in environmentalism, what are the impacts of deforestation on the environment and society?

- As an environmental expert, what are the most effective ways to reduce the use of single-use plastics and their impact on the environment?

- As an expert in environmentalism, what policies need to be put in place to address environmental issues?

- As an expert in environmentalism, what technologies have the potential to greatly reduce carbon emissions?

- As an expert in environmentalism, what steps can communities take to work together and address environmental issues?

On financial advice to agritourism businesses

- Please suggest effective savings & investment strategies for building wealth through an agritourism business.

- As an expert, please provide tips on creating a budget that works for an agritourism business.

- What are the top investment options for long-term growth of an agritourism business?

- Please suggest strategies for paying off debt of an agritourism business in a timely manner.

- Please provide tips on planning for a secure financial retirement of an agritourism entrepreneur.

- As a financial expert, what strategies would you suggest for an agritourism entrepreneur to maximize their retirement savings?

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- As a financial expert, what real estate investment options would you suggest for agritourism entrepreneurs looking to diversify their portfolio?

- What strategies would you recommend for someone looking to establish a rainy day fund for unexpected expenses?

On Customer Relations Management

- Please provide tips on how to improve communication in customer relations of an agritourism business.

- What are the best strategies for effectively handling conflict in customer relations of an agritourism business? How about discounts, gifts, freebies, champagne in their rooms, free-rides, rain checks, etc.

- What are the best ways to build trust in customer relations?

- What are the best strategies for having customers of an agritourism business return for more sales?

- As an expert, please provide tips on how to manage jealousy in customer relations.

- What are the best ways to keep live, long-term and prosperous customer relations?

- What are the best ways to make deeper customer relations and build customer loyalty?

- What are the best strategies for dealing with customers who are confrontational?

- What are the best strategies to restore trust in a small agritourism business?

- What are the best ways to restore contact with long-forgotten customers so they will return to and bring new income to the agritourism business?

    Politics, religion, alternative health, sex and personal gender preferences are off limits.

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AI tools for language learning

So many tools, so little time to play.

Within the first six months of 2023, AI tools, such as ChatGPT[83], Bing[84], Bard[85], Claude, etc have revolutionized the traditional language learning.

For an overview of the thousands of AI Tools sorted by product category, visit [86] and/or [87] and The #1 AI aggregator There Is an AI for That[88].

See also https://teflbarcelona.net/10-powerful-ai-tools-for-language-teachers/

Caution: some of these tools might not work or perform as promised. Consult the reviews section of each. Furthermore, these tools have a fixed number or lessons or words that may be not be relevant to the English-learning requirements of the TreasureHunt project.

Almost all of the following tools are not free; they provide limited time or character trial versions, but their full potential is behind paywalls. Despite their impressive front ends and functionalities, many of them require computer skills beyond the grasp of the average end user. Another issue is that the majority of the websites require users to sign up for an account even for the demo versions.

Learners are free to browse through any of the tools listed below. To avoid waste of time, however, learners must have clearly established goals and resources before starting their browsing.

Text to speech

One of the most active areas in the AI revolution, striving to provide more natural-sounding human voices, intonation, etc.

There are several TTS synthesis tools available, such as Google Text-to-Speech, Resemble AI, Murf AI and Synthesys, which offer a wide range of voices and languages to choose from. For a list of text to speech AI tools with human-like voices, visit [89] and [90]. These lists are by no means exhaustive, but provide a starting point in the quest for text-to-speech AI tools. All of these tools are freemium (free-to-try, pay-to-use) or they have some kind of limit on the number of words or characters the free version can handle or the time the tool will remain free. They support text-to-speech, voice generation and cloning, and offer hundreds of voices, styles (emotions), etc.

```
TTSMaker⁹¹ is a free exception to the above. In addition, they are
not standalone, meaning they do not run autonomously on a local
computer, but they include uploading text file(s) to the respective
website.

Murf AI, DALL-E, etc offer integration interfaces to Canva⁹².
```

Speech to text

Google Cloud Speech-to-Text, Microsoft Azure Speech to Text, and IBM Watson Speech to Text, which offer high accuracy and support multiple languages.

BUZZ offline audio transcription (speech to text conversion)[93] based on Open AI's Whisper.[94] Also, transcribes audio/video files with TIME STAMPS!!! Yields .srt, .txt files, etc. for subtitling.

Google docs add-in for dictation and speech to text conversion.

ConvertSpeech website. Online free speech-to-text for US English language.[95]

Chatbots for conversation practice

ChatGPT, Duolingo, and Replika are examples of popular language practice chatbots that utilize AI.

Video captioning and subtitling tools

YouTube's automatic captioning feature and Amara are examples of popular video captioning and subtitling tools that utilize AI.

Pronunciation assessment and feedback

ELSA Speak[96], Pronunciation Power, and SpeechAce[97] are examples of popular speech evaluation and feedback tools that utilize AI to help learners improve their pronunciation, fluency and overall quality of spoken English.

Grammar and vocabulary checkers

Grammarly, ProWritingAid, and Ginger are examples of popular grammar and vocabulary checker tools that utilize AI.

Language translation tools

Google Translate, DeepL, and Microsoft Translator, which support multiple languages and provide quick and relatively accurate translations

Adaptive learning platforms

Babbel, Rosetta Stone, and Duolingo are examples of popular adaptive learning platforms that utilize AI.

VR for immersive language learning

MondlyVR (chatbot and speech recognition), VRChat, and ImmerseMe, use AI-powered simulations to create virtual environments where learners can practice their language skills in realistic contexts.

Content creation tools for audio and video

Synthesia, Lumen5, and Content Samurai use AI technologies to generate original videos by automatically converting text into video content, complete with visuals, animations, and voice-over. Similarly, tools like Podcastle, Descript, and Audioburst use AI to generate original audio content by converting text into natural-sounding voice recordings.

The art of AI prompts

In general, AI prompts are verb requests to the computer to perform an action.

To tame the power of Large Language Models (LLM)[98], such as ChatGPT, Bing, Bard, Claude, etc. users must run a web search on "X list of prompts", where X is the LLM they intend to use. For example, the search "*GhatGPT list of prompts*" yielded a collection of over 3000 prompts, examples, use cases, APIs, etc.[99]

Language learning

https://www.weaiprompt.com/chatgpt-prompts-for-language-learning/

Practice

https://polyglotclub.com/wiki/Language/Multiple-languages/Culture/Useful-ChatGPT-Prompts-for-Language-Learning#Prompts_for_Practice_Conversations

Role playing

https://polyglotclub.com/wiki/Language/Multiple-languages/Culture/Useful-ChatGPT-Prompts-for-Language-Learning#Prompts_for_a_Role-play

Reading improvement

https://www.cambridge.org/elt/blog/2024/01/31/6-tips-for-using-generative-ai-tools-in-the-elt-classroom/ and

https://www.aigraderapp.com/ai-apps-for-teachers/top-ai-tools-for-reading-and-listening-comprehension-exercises/

Writing correctly

https://polyglotclub.com/wiki/Language/Multiple-languages/Culture/Useful-ChatGPT-Prompts-for-Language-Learning#Prompts_for_Checking_Writing_Correctness

Vocabulary building

https://polyglotclub.com/wiki/Language/Multiple-languages/Culture/Useful-ChatGPT-Prompts-for-Language-Learning#Prompts_for_Vocabulary_Building

Cultural understanding

https://polyglotclub.com/wiki/Language/Multiple-languages/Culture/Useful-ChatGPT-Prompts-for-Language-Learning#Prompts_for_Cultural_Understanding

Listening

https://www.britishcouncil.org/exam/aptis/research/projects/assessment-literacy/listening

Speaking

https://www.britishcouncil.org/exam/aptis/research/projects/assessment-literacy/speaking

Reading

https://www.britishcouncil.org/exam/aptis/research/projects/assessment-literacy/reading

Writing

https://www.britishcouncil.org/exam/aptis/research/projects/assessment-literacy/writing

Vocabulary

https://www.wordtune.com/blog/how-to-write-well-by-improving-your-vocabulary

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Appendix 4 – Good writing practices

If you ever find yourself not knowing how to start or what to write in a concise but informative way, remember the

5W + 1H

rule, where the Ws and H are initials of the words:

Who

What

Where

When

Why, and

How

These are the ultimate information fields necessary to convey a clear idea in a short way. The content for each of the above six fields can be as short as one word or up to one sentence.

A cookbook for good writing

Below are some guiding principles:

- Don't hype. Avoid words like novel, highly, clearly, greatly. Better still, avoid all adverbs.

- Don't use clichés. In a nutshell, by and large, they are clear as mud.

- Don't use "very" too often. Usually, it can be replaced with better one.

- Be concise. Avoid phrases like "by means of", "despite the fact that", "in order to"; replace them with the much shorter "by", "despite" and "to".

- Avoid negatives. For example, use "unable" instead of "not able".

- Avoid redundancy. For example, use "investigate" instead of "conduct an investigation of".

- Use active voice. Although not always possible, most of the text should be in active voice.

- Avoid inappropriate language. Keep words like "really", "actually", "pretty much" for social networks.

- Avoid rare words and latinisms. Non credo all readers know the meaning.

- Keep abbreviations to a minimum. Abbreviations are hard to read, consider just spelling it out.

- Beware of zombie nouns. Utilization of nominalization is causation of distraction.

- Do not use "tortured phrases"; they are signs of generative AI text and paper mills.

Guidelines for writing in plain language

https://www.plainlanguage.gov/guidelines/

https://www.gov.uk/guidance/style-guide/a-to-z-of-gov-uk-style

Consult: Writing Skills Practice Book for EFL

https://usafiles.net/HB3/
How_to_Write_Effective_Business_English_Your_Guide_to_Excellent_Pro
fessional_Communication_4th_Edition.pdf

BBC How to Worksheets

https://www.bbc.co.uk/learningenglish/english/downloads

How to write e-mails in English

18 office ready email writing tips
https://www.wallstreetenglish.com/blog/how-to-write-formal-emails-in-english
https://www.youtube.com/watch?v=xay5TeJVSC0
https://www.youtube.com/watch?v=3Tu1jN65slw
https://www.youtube.com/watch?v=moIucWGgvMc

How to write a good email

https://learningenglish.voanews.com/a/how-to-write-a-good-email/
5649722.html

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Appendix 5 – Gamification

The value of gamification in learning languages has been established worldwide. Games, however, are a double-edged sword for language learning. Action-packed, captivating and addictive games, full of special effects and graphics can detract user attention to action; thus, these games are a waste of time that could be invested in learning. Games with no action, on the other hand, can become boring, and thus learners abandon them soon with limited learning success.

Simulation games, such as Second Life, Minesweeper, SimFarm, etc. and can be also helpful to learning English and for developing other soft skills, such as communication, managerial, financial, marketing, etc. and thus are highly recommended as past-time activities.

Added games, videos, podcasts, crossword puzzles, find-the-word, hangman, etc. can also provide engaging content, and therefore can be used for linguistic or other soft-skill development. However, caution is recommended because game action may consume precious study time, although recently, it has been supported that action video games can be used for language learning.[100], [101]

Other popular commercial games, not necessarily online, are Taboo, Scrabble, Trivial Pursuit, etc. Interested learners can use their creativity to devise their own educational games, whether language- or soft-skill oriented, based on the games mentioned above. For example, learners can devise their own deck of cards with agritourism terms from the project Glossary to play Taboo.

In addition to the classical word games, like charades, hangman, anagrams, crossword puzzles, find-the-word, Scrabble and tongue-twisters, there are several public webpages with word games, quizzes, etc. such as Quizlet[102], Games for Pages[103], Merriam Webster's Dictionary Games & Quizzes[104], the Facebook Word Games page[105], and other webpages with lists of English language learning games[106].

The global rise of word games

Worldwide, people seem to love word games. The COVID-19 epidemic, the lockdowns and remote working enhanced this picture. The New York Times Games webpage has become viral and a source of substantial income, averaging over 10 million daily players across all platforms and 1 million premium subscribers.[107] Other major US daily newspapers, such as The Washington Post[108] and Los Angeles Times[109] have special Word Games webpages with about 40 games each ranging from Crossword to Scramble to Anagrams to Wordsearch to Spelling Bee[110], etc. on a subscription basis. European English speaking journals, such as The Guardian, follow suit and publish regularly word games,[111] articles and reviews about word games[112]. A couple of years ago, The Guardian published a review article with a list of the best word games to try after Wordle[113], a very popular word game.

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A search on Google Play revealed over 30 free to download word games extensions that can be installed on Google Chrome, whereas a "word games" search on Amazon revealed 703 items!

Word games as a language-learning tool

Just because word games are popular for entertainment, does not make them automatically suitable for language learning.

A Google Scholar search for the keywords "games for effective language learning" yielded a list of over 200 technical publications published in the last 25 years. The consensus among these papers was that interactive games can be used for effective language learning as they improve learner engagement, motivation and learning outcomes in classroom.

It is estimated that there are up to 100 online games (free or behind paywalls) that can be used for language learning.

To assess the opinion of the language-educator community, however, we asked a number of questions: Do word games have any educational/didactic/learning/pedagogical value? Can word games be used for effective language learning? What is the position of the major English-learning/teaching/testing institutions, such as the British Council, Cambridge English Language Assessment, IELTS, Educational Testing Service's Test of English as a Foreign Language (TOEFL), American and British Universities, and American English at the US Dept. of State, regarding the use of games for English language learning purposes?

All of the above English-language learning/testing institutions have games on their websites. Some of them mention particularly the benefits of spaced-repetition flashcard Anki software and recommend that learning games are tested first by the teacher and knowledge passed on to the learners.[114] Odo (2016) made the interesting point that teachers' experience in learning English gives them valuable insights that can be used to evaluate the effectiveness of online suggested learning games.[115] Others point out that word games make learners feel comfortable with one another, massage learner brains and thus open them up to receive new knowledge, and remove the feeling of anxiety and threat.[116]

Other commercial, online language-learning platforms, such as DuoLingo, thrive (3M Ratings in the Mac App Store with an average of 4.7 out of 5 stars) by offering some kind of educational games. Below is the Editors' Choice Note for the app:

> *With its friendly approach and awesome updates, Duolingo's long been one of our favorite apps for learning another language. Its secret: making the process genuinely fun. Engaging mini-games test your reading, writing and speaking skills and joining a club (where you can encourage and compete with others) adds a great social element. Bonus: all those languages and games are available for free!*

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Appendix 6 – How to make the Educational Games

Introduction

Appendix 6 is addressed to both learning coaches and learners that want to get a look under the hood of the Educational Games. The two groups must have a good knowledge of English, computer knowledge beyond the end-user level, and must be willing to experiment while studying.

The groups will build their own Educational Games/Exercises, based on PR4 and enhanced by the latest AI technology. Hence, the groups will learn by shadowing Part II and thus gain experience in making exercises for each linguistic skill and perhaps develop some ideas on how to enrich course teaching/learning.

Learners develop their own exercises by using the Hot Potatoes suite of programs and shadowing the Educational Games in Part II. Required for active learner involvement in the learning process, understanding the mechanics of exercises, and mastering various tools useful in many learning situations. Refer to the Evaluation standards section above about how global leaders in English testing structure their tests.

Moreover, Appendix 6 contains innovative, quantitative and objective methods of self-assessment, references to educational material beyond the TREASUREHUNT project for practice, tools for overcoming the weaknesses of the training material (see Strengths and weaknesses of training material, above), etc.

Appendix 6 can be used as a textbook or reference point for English-language studying and continuous self-improvement after the TREASUREHUNT project ending date. Therefore, Appendix 6 is not for the faint-hearted and needs special handling. In addition, Appendix 6 contains information beyond the TREASUREHUNT project, such as references to audiobooks and podcasts, Thinking-Out-of-the-Box, Fun & Games, and AI-enhancements sections.

With the wealth of training material offered, Appendix 6 could be blamed for not leaving enough freedom for learners to take initiatives and learning into their own hands. It should be clarified, however, that the material presented in Appendix 6 is suggested material and could act as template for learners to create their own learning plan or modify these suggestions as required.

This expanded learning material in Appendix 6 came as a response to anonymous criticisms about who will be monitoring learner progress and how. Critics seem to forget that the TREASUREHUNT project has a strong self-study component, and thus the responsibility of continuous progress monitoring lies with the learners. Appendix 6 provides many check points for self-monitoring while it could be upgraded later for direct learner progress monitoring.

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Listening skills

Learners prepare their individual Learning Plan for Listening skills, based on the Proposed learning plan template, above.

Output: 3 games for Listening Skills improvement (Connections, Listen and fit and Listen Up)

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Table 4: Listening skills educational game development plan

	Game		
	Connections	**Listen and fit**	**Listen Up**
Objective	improved learner listening comprehension at the term level.	improved learner listening comprehension skills at the sentence level.	develop a test for improving learner listening comprehension skills at the paragraph level.
Type of questions	Match type	Match type	Fill-in the blanks
Hot Potatoes application	JMatch[117]	JMatch (see [117, 118])	JCloze[118]
Sample tests	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/listening/5.6.1.L.A-MATCH.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/listening/5.6.1.L.B-MATCH.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/listening/5.6.1.L.C-FIB.htm
Learner action	Listen to the audio and drag-and-drop it next to its written form.	Listen to the audio and drag-and-drop it to the sentence from where it is missing.	Listen to the audio of each sentence and fill-in-the blanks from the drop-down menu of terms next to the missing term.
Development guidelines	For each Lesson in a Module, 1. Select at random 10 vocabulary	For each Lesson in a Module, 1. Select 10 sentences including	For each Lesson in a Module, 1. Select a 50-100 word text

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		Game	
	Connections	**Listen and fit**	**Listen Up**
	terms from the Lesson. 2. Convert each term to audio using the text-to-speech tools in Appendix 2 – Language learning utilities.[119] 3. Insert each written term in a cell of the left column of the JMatch tool. 4. In each cell of the right column, enter a link[120] to an audio file corresponding to the term on the left cell.. 5. Save the JMatch file and output to .htm file. 6. Repeat the above for the other two Lessons in the Module, and each of the six Modules of PR4.	Case Studies. Each sentence should contain one and only one of the glossary terms (the target term) for the specific lesson. 2. Record each sentence using the tools in Appendix 2 – Language learning utilities and embed the audio file in the left column of the JMatch program. 3. Insert the sentences in the left column of the JMatch. 4. Replace the term in question with blanks. 5. In the right column, create a link to the appropriate term.[119] 6. Save the JMatch file and output to .htm file. 7. Repeat the above for the other two Lessons in the Module, and	segment. Each select sentence must contain one glossary term. If a sentence does not contain a term, skip it. 2. Enter the text to the JCloze tool. 3. Select 10-15 terms from the text and blank them.[121] 4. Use one of the text-to-speech conversion tools in Appendix 2 – Language learning utilities to make a recording of the full text segment (no blanks). 5. Make a recording at normal speed, a second one with 5-sec breaks between sentences, and a third recording with 3-sec breaks between sentences. Make sure you include full-word references to punctuation symbols.

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	Game		
	Connections	**Listen and fit**	**Listen Up**
		each of the six Modules in PR4.	6. Download and save the three .mp3 files. 7. In the JCloze > Titles/Instructions tab, "Exercise subtitle:" and the "Instructions:" panes, provide instructions and the links to each .mp3 file.[122] 8. Use the Listen Up Sample tests, above, as a template for the instructions text. 9. Save the JCloze file and export it as .htm file 10. Repeat the above for the other two Lessons in the Module, and each of the six Modules in PR4.

Pronunciation assistance

https://www.merriam-webster.com/, enter the word and click on the speaker icon

In your browser, enter "English to X google translate", where X is the learner native language; in the left pane of the opening window, type the English word and click on the speaker icon

https://www.wordreference.com/; interesting selection of English dialects. Enter the word in the browser box, click on Search (magnifying lens), and click on the speaker icon

Desktop environments

1. In Google Chrome, install the free Speechify extension, or the series of alternative extensions listed in Text-to-speech converters in Appendix 2 – Language learning utilities.

2. Speechify highlights each word of the text while reading it; thus it is easier for learners to monitor the reading flow and make the association between listening and reading.

3. Login to the TREASUREHUNT project website[123].

4. Select a lesson to study. Break it to smaller manageable segments, such as paragraphs.

5. Move your cursor to the left of a paragraph; the blue circle with a white triangle icon ( ) moves with your cursor.

6. Select a chunk of text you would like to have Speechify read to you.

7. Click on the triangle icon for the app to start reading.

8. Adjust the voice, pronunciation and speed by clicking on the emerging pane at the bottom right corner of the screen.

9. Replay the segment as many times as necessary to train learners ears to the sound of the segment.

10. Learners will judge themselves how many times to repeat the listening process. Keep in mind that practice makes perfect.[124]

11. Focus on listening to pronunciation and intonation details; read aloud for speaking skills will come later.

12. Once they have finished their listening practice on the paragraph, learners move on to the next one and repeat the above series of steps.

In other browsers, such as Firefox, "speechify" may not be available; however, the "Read Aloud: A Text to Speech Voice Reader" or "Text to Speech" add-ons yield equally good results.

Microsoft Edge comes with a built-in Immersive Reader read aloud functionality (icon to the left of the "Add this page to favorites (Ctrl+D) star); click on the Immersive Reader icon and a new pane will emerge; click on the "Read aloud" button to start reading.

Settings are available by clicking the hamburger icon at the top row of and include country/reading selection, voices, etc.

To practice their listening skills, learners can have Microsoft Edge read aloud a particular section as follows:

1. Make sure you have Microsoft Edge installed.

2. Highlight a text segment.

3. Click on the Immersive Reader icon (open book icon with a speaker symbol) on the search bar.

4. Click on "Reading Preferences" and select settings.

5. Click on the "Read Aloud" link.

6. Click on the "Pause" symbol (two parallel bars) at the middle top line of the window to interrupt reading.

7. Click the "Voice Options" link to the right of the browser window, to make more settings.

8. Click on the "Continue to Read Aloud" button to resume reading.

9. Repeat steps 2-8 as many times as necessary.

10. Be your own judge regarding when to stop.

The benefit of browser extensions and add-ons is that they run locally and do not require export of the training material to servers outside the TREASUREHUNT project website.

Smartphones

iPhone built-in voice capabilities

Settings > Accessibility > Spoken Content > Speak Selection > Highlight Content On

OR

Settings > Accessibility > Spoken Content > Speak Selection On (to speak selected text) > Speak Screen On > Highlight Content On

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For UK English voices,

Settings > Accessibility > Spoken Content > Speak Selection > Speak Screen On > Pronunciations > + > Languages – English UK >

Voice selection

Settings > Accessibility > Spoken Content > Speak Selection > Speak Screen On > Pronunciations > + > Voices > All > Set your preference.

Self-assessment

Once learners have studied sufficiently for the Lesson, as described above, it is recommended that they take the respective self-assessment and compare their performance with the set goals. The existing Educational Games (https://treasurehunt-games.oikothesis.org/) provide the self-assessment tool and sample tests.

If Self-assessment scores are in the "Far:" range of the respective End point, learners must review the training material to identify weaknesses and take remedial action.

An additional step in this direction is to prepare Listening skills Educational Games as described in Table 4: Listening skills educational game development plan, above. This step enhances active learning and provides additional leverage for improved performance.

The review process and remedial action cycle must continue until Self-assessment scores are within the "Near:" range of the End point scores.

At that point, learners are considered ready to proceed to the Evaluation.

Evaluation

Login to the TREASUREHUNT e-learning platform (https://edu.treasurehuntproject.eu/modules).

If you don't have an account, sign up for free.

Take the tests in the respective Module and Lesson.

The tests are closed-type questions and they are very similar to the Educational Games.

You can interrupt the test-taking and continue later.

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HUNT
IN YOUR
NEIGHBOUR'S
BACKYARD
finding new ways for
European agritourism

Upon successful completion, you will receive a personalized
certificate of completion for the Module.

Speaking skills

Output: 3 Educational Games for Speaking Skills improvement (Sounds similar? Rhyming words, Spot the not)

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Table 5: Speaking skills educational game development plan

	Game		
	Sounds similar?	**Rhyming words**	**Spot the not**
Objective	improve speaking skills by active learner term pronunciation recall and comparison with pronunciation of other words *to find sound similarities*	improve speaking skills by active learner term pronunciation recall and comparison with pronunciation of other words *to find sound similarities*	improve speaking skills by active learner term pronunciation recall and *contrast* with pronunciation of other words *to find dissimilarity*
Type of questions	Multiple-choice	Multiple-choice	Multiple-choice
Hot Potatoes application	JQuiz[125]	JQuiz	JQuiz
Sample tests	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/speaking/5.6.1.S.A-MC.jmt.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/speaking/5.6.1.S.B-MC.jmt.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/speaking/5.6.1.S.C-MC.jmt.htm
Learner action	Find the word that sounds exactly the same (homophone)[126] OR has similar sounding ending (rhyming) with the given term. Learners will have to actively pronounce the given term and each of the choices and decide which has an identical sound or the ending sound is closest to the term.	Find the word that has similar sounding ending (rhyming) with the given term. Learners will have to actively pronounce the given term and each of the choices and decide which ending sound is closest to the term.	Identify the word with different sounding ending with the given term. Learners will have to actively pronounce the given term and each of the choices and decide which ending sound is DIFFERENT from the term.

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	Game		
	Sounds similar?	**Rhyming words**	**Spot the not**
Development guidelines	For each Lesson, 1. Select 5-10 glossary terms from the Lesson 2. Find 3-4 homophones or rhyming words[127] for each term 3. Use the JQuiz application of Hot Potatoes to make a multiple-choice test 4. Enter the term in the Question box of JQuiz 5. Select Multipe-choice from the drop-down menu to the right of the Question box 6. Enter each choice in a separate cell in the Answers column 7. In the Settings column, click on "Accept as correct" to indicate the correct answer 8. Save the JQuiz file and export as a	For each Lesson, 1. Select 5-10 glossary terms from the Lesson. 2. Find one rhyming word[129] and 2-3 non-rhyming choices per term 3. Follow steps 3-8 of the Development guidelines in A) Sounds similar? above to make a multiple-choice test 4. Repeat the above for each of the other two Lessons in the Module, and 5. Repeat for all Modules.	For each Lesson, 1. Select 5-10 glossary terms from the Lesson. 2. Find 3-4 rhyming words and one which has a different sounding ending for each term 3. Follow steps 3-8 of the Development guidelines in A) Sounds similar? above to make a multiple-choice test. The correct answer is the word that has different sounding ending 4. Repeat the above for each of the other two Lessons in the Module, and 5. Repeat for all Modules.

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	Game		
	Sounds similar?	**Rhyming words**	**Spot the not**
	.htm file 9. Repeat the above for each of the other two lessons in the Module, and 10. Repeat for all Modules.		

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Self-assessment

Once learners have studied sufficiently for the Lesson, as described above, it is recommended that they take the respective self-assessment and compare their performance with the set goals. The existing Educational Games (https://treasurehunt-games.oikothesis.org/) provide the self-assessment tool and sample tests.

If Self-assessment scores are in the "Far:" range of the respective End point, learners must review the training material to identify weaknesses and take remedial action.

An additional step in this direction is to prepare Speaking skills Educational Games as described in Table 5: Speaking skills educational game development plan, above. This step enhances active learning and provides additional leverage for improved performance.

The review process and remedial action cycle must continue until Self-assessment scores are within the "Near:" range of the End point scores.

At that point, learners are considered ready to proceed to the Evaluation.

Evaluation

Login to the TREASUREHUNT e-learning platform (https://edu.treasurehuntproject.eu/modules).

If you don't have an account, sign up for free.

Take the tests in the respective Module and Lesson.

The tests are closed-type questions and they are very similar to the Educational Games.

You can interrupt the test-taking and continue later.

Upon successful completion, you will receive a personalized certificate of completion for the Module.

Reading skills

Output: 4 Educational Games for reading skills improvement: Letter soup, Word detective, CluesO, Scripting

Table 6: Reading skills educational game development plan

	Game			
	Letter soup	**Word detective**	**CluesO**	**Scripting**
Objective	Improved reading fluency skills by recognizing the correct sequence of letters in a term	Improved reading fluency and comprehension skills by recognizing the word sequence and placing the words in the correct order to form a sentence	Improved reading comprehension skills by reading a short text and answering the questions based on the text, while the text is displayed on screen	Improved reading comprehension skills at the sentence level by placing fragments of a paragraph in the correct order to form a short cohesive story
Type of questions	Scrambled letters-in-a-term	Mixed words in a sentence	Multiple choice	Paragraph fragment sequencing
Hot Potatoes application	JMix[128]	JMix	JQuiz[129]	Sequitur[130]
Sample tests	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/reading/5.6.1.R.A-MIX-03.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/reading/5.6.1.R.B-MIX-04.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/reading/5.6.1.R.C-MC.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/reading/5.6.1.R.D-SEQ.htm
Learner action	Rearrange the scrambled letters to form a glossary term. Clues (definition)	Rearrange the scrambled words to form a complete sentence. Clicking on "Hint"	Read the text displayed and use the information in it to answer the questions	Drag and drop paragraph fragments to the correct order to form a short story.

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	Game			
	Letter soup	**Word detective**	**CluesO**	**Scripting**
	provide additional information provided and clicking on "Hint" provides the next letter in sequence	provides the next word in sequence	displayed on the right pane.	Learners will have to comprehend the meaning of fragments and place them in the correct order to form a short story.
Development guidelines	For each Lesson, 1. Select 5-10 glossary terms 2. Run the JMix Performance monitoring 3. In the Main sentence box, insert one glossary term 4. Press Enter after each character, so that each character is on a separate line 5. Provide a Clue (e.g. glossary definition) for the term (Options >	For each Lesson, 1. Select a sentence consisting of 5-10 words 2. Run the JMix Performance monitoring 3. In the Main sentence box, insert the selected sentence 4. Break the sentence into words by pressing Enter after each word 5. At production time, JMix will randomize the order of words	For each Lesson, 1. Select a text of 100-200 words 2. Copy the text to the clipboard 3. Run the JQuiz Performance monitoring 4. Insert the selected text (File > Add Reading Text > Paste in the text box of the "Add Reading Text" window > OK) 5. In the Question box enter the question text	For each Lesson, 1. Select a paragraph of 100-200 words 2. Copy the text to the clipboard 3. Run the Sequitur application 4. Insert the selected text (File > Import a Text File > Paste in the text box) 5. Insert breaks at the points desired or let Sequitur insert breaks automatically (Options

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	Game			
	Letter soup	**Word detective**	**CluesO**	**Scripting**
	Configure Output > Instructions: > Enter the clue) 6. Save the JMix exercise, and 7. Export the output as a .htm file. Each time the .htm file is run, Hot Potatoes will randomize the order of letters. 8. Each instance of JMix contains one word only, thus repeat the above for each of the other selected words in the Lesson 9. Repeat the above for the other Lessons in the Module	6. Save the JMix exercise, and 7. Export the output as a .htm file. Each time the .htm file is run, Hot Potatoes will randomize the order of words. 8. Each instance of JMix contains one sentence only, thus repeat the above for each of the other selected sentences in the Lesson 9. Repeat the above for the other Lessons in the Module	6. In the Answers column, insert the choices one choice per cell 7. In the box next to the Question box, click on the up or down arrow to select "Multiple-choice" 8. Click on the "Accepted as correct" checkbox in the Settings column to note the correct answer 9. Click on the up arrow next to Q1, to continue adding questions and answers to insert as many Questions and Answers as necessary 10. Save the JQuiz exercise, and 11. Export the output as a .htm file	> Auto-break Text and enter the number of words within a segment) 6. Save the Sequitur file, and 7. Export the output as a .htm file. Each time the .htm file is run, Hot Potatoes will randomize the order of segments. 8. Repeat the above for the other Lessons in the Module

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	Game			
	Letter soup	**Word detective**	**CluesO**	**Scripting**
			12. Repeat the above for the other Lessons in the Module	

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Performance monitoring

Keep track of:

- number if words count in the original text

- how many minutes did it take you to read the entire text?

- how many words did you read?

- how many words did you omit or skip or forget to read?

- how many mistakes (mispronunciation, etc) did you make?

- how many times did you stop and restart reading a sentence?

- assuming an average native-English speaker reading speed of 190 *correct* words (= total words – omitted - mispronunciations) per minute, was your reading satisfactory?

Self-assessment

Once learners have studied sufficiently for the Lesson, as described above, it is recommended that they take the respective self-assessment and compare their performance with the set goals. The existing Educational Games (https://treasurehunt-games.oikothesis.org/) provide the self-assessment tool and sample tests.

If Self-assessment scores are in the "Far:" range of the respective End point, learners must review the training material to identify weaknesses and take remedial action.

An additional step in this direction is to prepare Reading skills Educational Games as described in Table 6: Reading skills educational game development plan, above. This step enhances active learning and provides additional leverage for improved performance.

The review process and remedial action cycle must continue until Self-assessment scores are within the "Near:" range of the End point scores.

At that point, learners are considered ready to proceed to the Evaluation.

Evaluation

Login to the TREASUREHUNT e-learning platform (https://edu.treasurehuntproject.eu/modules).

If you don't have an account, sign up for free.

Take the tests in the respective Module and Lesson.

The tests are closed-type questions and they are very similar to the Educational Games.

You can interrupt the test-taking and continue later.

Upon successful completion, you will receive a personalized certificate of completion for the Module.

Writing skills

Output: 3 Educational Games for reading skills improvement: Spelling bee, Word safari, Note taking

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Table 7: Writing skills educational games development plan[131]

	Game		
	Spelling bee*	**Word safari**	**Note taking***
Objective	Improved spelling skills	Improved writing skills assessed by entering the correct word (in spelling) with the correct spelling	Improved listening and writing skills; increased capacity to take notes of important points during meetings with partners, clients, suppliers, etc.
Type of questions	Multiple-choice	Fill-in-the-blanks	Fill-in-the-blanks
Hot Potatoes application	JQuiz	JCloze	JCloze
Sample tests	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/writing/5.6.1.W.C-Spell.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/writing/5.6.1.W.B-FIB.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/writing/5.6.1.W.A-Dictation.htm
Learner action	Click on the link to listen to the word and type in the answer in lowercase in the box below. No hints or clues provided.	Type in all the missing words in the respective blanks. Help provided by "Hints", which give the next letter in a word. Some Modules provide clues, such as definition of terms.	Learners listen to the recording in various speeds to familiarize themselves. To take the text, they playback at reduced speed and typed-in the text in the provided boxes.
Development guidelines	For each Lesson in a Module,	For each Lesson in a Module,	For each Lesson in a Module,

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Game		
Spelling bee*	**Word safari**	**Note taking***
1. Select 5-10 terms 2. Make a recording of each 3. Run the JQuiz Performance monitoring 4. In the Question box, below the Title, insert a link to the recording of one of the selected terms 5. Select Short-answer from the drop-down menu to the right of the Question box 6. Select Weighing = 100 7. In the Answers box, enter the term 8. Click on the "Accept as correct" checkbox in the Settings column to note the correct answer 9. Click on the little black up arrow next to Q1, to continue adding questions (links to the audio	1. Select a 50-100 word text segment. Each select sentence must contain one glossary term. If a sentence does not contain a term, skip it. 2. Enter the text to the JCloze tool. 3. Select 10-15 terms from the text and blank them.[132] 4. When you click on the Gap button, JCloze will ask if you want to insert a Clue or Alternative correct answers. It is recommended to enter a Clue, and Alternative correct answer(s), if applicable.[133] 5. In the JCloze > Titles/Instructions tab, "Exercise subtitle:" and the "Instructions:" panes, provide instructions. 6. Save the JCloze file and export it	1. Select a text of 100-200 words 2. Copy the text to the clipboard 3. Run the JCloze Performance monitoring 4. Insert the selected text (File > Add Reading Text > Paste in the text box of the "Add Reading Text" window > OK) 5. In the JCloze window displaying the inserted text, break the text to appropriate segments according to size and meaning, i.e. not too many words per segment and possibly each segment having its own independent meaning. Alternatively, you may chose to let JCloze break the segment automatically 6. Use ttsmaker.com to make a recording of the text in normal,

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	Game		
	Spelling bee*	**Word safari**	**Note taking***
	recording of each term) and answers 10. Repeat the above for the rest of the selected terms 11. Click Options > Mode > Advanced mode 12. Save the JQuiz exercise, and 13. Export the output as a .htm file 14. Repeat the above for the other Lessons in the Module, and the six Modules of PR4.	as .htm file 7. Repeat the above for the other two Lessons in the Module, and each of the six Modules in PR4.	reduced and slow speeds; make sure that you insert breaks at the text break points 7. Click Options > Configure Output 8. In the Titles/Instructions tab, click on Instructions: to enter the appropriate links to the audio files and possible instructions to the end-user (See sample tests, above) 9. Click OK 10. Save the .jcl file, and 11. Export the output as a .htm file 12. Repeat the above for the other Lessons in the Module
* This test combines listening and writing skills; learners will listen to the audio recording of single terms or segments, and will have to type in each item on screen.			

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Self-assessment

Once learners have studied sufficiently for the Lesson, as described above, it is recommended that they take the respective self-assessment and compare their performance with the set goals. The existing Educational Games (https://treasurehunt-games.oikothesis.org/) provide the self-assessment tool and sample tests.

If Self-assessment scores are in the "Far:" range of the respective End point, learners must review the training material to identify weaknesses and take remedial action.

An additional step in this direction is to prepare Writing skills Educational Games as described in Table 7: Writing skills educational games development plan, above. This step enhances active learning and provides additional leverage for improved performance.

The review process and remedial action cycle must continue until Self-assessment scores are within the "Near:" range of the End point scores.

At that point, learners are considered ready to proceed to the Evaluation.

Evaluation

Login to the TREASUREHUNT e-learning platform (https://edu.treasurehuntproject.eu/modules).

If you don't have an account, sign up for free.

Take the tests in the respective Module and Lesson.

The tests are closed-type questions and they are very similar to the Educational Games.

You can interrupt the test-taking and continue later.

Upon successful completion, you will receive a personalized certificate of completion for the Module.

Vocabulary skills

For some hints on how to practice Vocabulary Skills, refer to Flashcards, In: *How to construct your own exercises and tests*, p. 4[134]

Table 8: Vocabulary skills educational games development plan

	Game			
	TermID	**Lord of the Words**	**Matchmaker**	**Crossword**
Objective	Improved vocabulary skills by reinforcing association between an English term and its English definition.	Improved vocabulary skills by recognizing words even when letters are in random order.	Improved vocabulary skills by recognizing the meaning of the term and using it within sentences.	Improved vocabulary skills and term identification by its term and use in an out-of-sentence environment.
Type of questions	Match-type	Jumbled letters	Fill-in-the-blanks	Crossword puzzle
Hot Potatoes application	JMatch	JMix	JCloze	JCross
Sample tests	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/vocabulary/5.6.1.V.A-MATCH.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/vocabulary/5.6.1.V.B-MIX-04.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/vocabulary/5.6.1.V.C-FIB.htm	https://treasurehunt-games.oikothesis.org/PR5-HotPot/EL2/vocabulary/5.6.1.V.D-CW.htm
Learner action	Drag the English definition next to the corresponding English term	Drag and drop each letter to the correct position to form a glossary term. Learners can open the next letter by clicking on the "Hint" button. No other clues (definitions)	Match terms and sentences and fill-in-the-blanks by selecting the appropriate term from the drop-down menu next to the blanks	Solve the crossword puzzle. Clues provide identification information (definition) of a term, "Hint" provides the next letter.

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	Game			
	TermID	**Lord of the Words**	**Matchmaker**	**Crossword**
		provided.		
Development guidelines	For each Lesson in a Module, 1. Select 5-10 terms. 2. Use the TREASUREHUNT project agritourism glossary[135] to find the English definition of each term. 3. Run the JMatch program 4. Insert each term in a separate cell of the left column of JMatch. 5. Insert the matcing definitions of term in the cells of the right column of JMatch. 6. Save the JMatch file and output to .htm file.	For each Lesson in a Module, 1. Select 5-10 glossary terms 2. Run the JMix program 3. In the Main sentence box, insert one glossary term 4. Press Enter after each character, so that each character is on a separate line 5. Save the .jmx file, and 6. Export the output as a .htm file. Each time the .htm file is run, Hot Potatoes will randomize the order of letters 7. Each instance of JMix	For each Lesson in a Module, 1. Select a 100-200 word text segment. Each sentence of the selected segment must contain one glossary term. If a sentence does not contain a term, skip it; it will not cause much harm. The final text must contain 10-12 glossary terms. 2. Copy the text to the clipboard. 3. Run the JCloze program 4. Insert the text to the JCloze (File > Add Reading Text > Paste).	For each Lesson in a Module, 1. Select 15-20 terms 2. Copy these terms one term per line to the clipboard. 3. Run the JCross program of Hot Potatoes 4. Click on Manage Grid > Automatic Grid-Maker 5. In the "Create a crossword grid automatically" frame, paste the list of terms on the left box 6. Click on "Make the grid" button 7. On the main screen of JCross, click on the "Add

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	Game			
	TermID	**Lord of the Words**	**Matchmaker**	**Crossword**
	7. Repeat the above for the other two Lessons in the Module, and each of the six Modules in PR4.	contains one word only, thus repeat the above for each of the other selected words in the Lesson 8. Repeat the above for the other Lessons in the Module	5. In the main screen of JCloze, blank each one of the 10-12 terms.[136] 6. When you click on the Gap button, JCloze will ask if you want to insert a Clue or Alternative correct answers. Do not add any Clues[137], but add alternative answers (e.g. Agritourism and Agrotourism), if applicable. 7. In the JCloze > Titles/Instructions tab, "Exercise subtitle:" and the "Instructions:" panes, provide instructions. 8. Save the JCloze file and export it as .htm file 9. Repeat the above for the	Clues" button 8. Add each clue to the respective term 9. Save the .jsw file, and 10. Export the output of it as .htm file 11. Repeat the above for the other two Lessons in the Module and each of the six Modules in PR4.

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	Game			
	TermID	**Lord of the Words**	**Matchmaker**	**Crossword**
			other two Lessons in the Module, and each Module in PR4.	

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Self-assessment

Once learners have studied sufficiently for the Lesson, as described above, it is recommended that they take the respective self-assessment and compare their performance with the set goals. The existing Educational Games (https://treasurehunt-games.oikothesis.org/) provide the self-assessment tool and sample tests.

If Self-assessment scores are in the "Far:" range of the respective End point, learners must review the training material to identify weaknesses and take remedial action.

An additional step in this direction is to prepare Vocabulary skills Educational Games as described in Table 8: Vocabulary skills educational games development plan, above. This step enhances active learning and provides additional leverage for improved performance.

The review process and remedial action cycle must continue until Self-assessment scores are within the "Near:" range of the End point scores.

At that point, learners are considered ready to proceed to the Evaluation.

Evaluation

Login to the TREASUREHUNT e-learning platform (https://edu.treasurehuntproject.eu/modules).

If you don't have an account, sign up for free.

Take the tests in the respective Module and Lesson.

The tests are closed-type questions and they are very similar to the Educational Games.

You can interrupt the test-taking and continue later.

Upon successful completion, you will receive a personalized certificate of completion for the Module.

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finding new ways for
European agritourism

Endnotes

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1 https://www.youtube.com/watch?v=fM6sOUylrM0

2 https://www.theverge.com/2023/11/21/23971489/openai-chatgpt-voice-feature-ceo-drama

3 https://www.ethnos.gr/Politics/article/102098/ypotheshskoilelikikoytoparaskhniopisoapotofiaskothsthlekatartishs (in Greek)

4 This was caution is not new, and it has been around since the release of the sci-fi movie "2001: A Space Odyssey" in 1968.

5 Berry, V. Assessing English for Specific Purposes.

6 as of December 2023.

7 Fillmore, H.A., 2015. The effect of daily internet usage on a short attention span and academic performance. *Yayınlanmamış doktora tezi, Hochschule Mitweida University of Applied Sciences*

8 https://economictimes.indiatimes.com/tech/internet/heres-how-technology-affects-our-life/technology-addiction/slideshow/62497145.cms

9 https://www.theguardian.com/lifeandstyle/2018/oct/14/the-lost-art-of-concentration-being-distracted-in-a-digital-world

10 https://www.thetreetop.com/statistics/average-human-attention-span

11 https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=090000168045bb52

12 https://www.oxfordlearnersdictionaries.com/external/pdf/wordlists/oxford-3000-5000/The_Oxford_3000.pdf, https://www.bbc.co.uk/learningenglish/english/course/test-your-level

13 Vinutha U. Muktamath, Priya R. Hegde and Samreen Chand, 2021. Types of Specific Learning Disability. In: Misciagna S (ed.) (2022) Learning Disabilities - Neurobiology, Assessment, Clinical Features and Treatments. IntechOpen. Available at: http://dx.doi.org/10.5772/intechopen.95219.

14 Can learning be addictive? | Tigran Sloyan | TEDxYerevan - https://www.youtube.com/watch?v=UdsUVjeJuPE

15 https://www.youtube.com/watch?v=P6FORpg0KVo

16 https://www.onepeloton.com/blog/how-long-does-it-take-to-form-a-habit/

17 See PR4: TRAINING PACKAGE ON AGRITOURISM, p. 134

18 https://www.britishcouncil.org/voices-magazine/babies%E2%80%99-language-learning-can-help-adult-learners

19 https://www.leonardoenglish.com/blog/the-simple-guide-to-english-word-order#toc-10

20 https://www.sciencedirect.com/science/article/abs/pii/S0010027718300994

21 https://medium.com/@chacon/mit-scientists-prove-adults-learn-language-to-fluency-nearly-as-well-as-children-1de888d1d45f

22 https://www.babiesandlanguage.com/why-is-it-more-difficult-for-adults-to-learn-new-languages-than-it-is-for-kids/

23 https://uklp.com/adults-better-learning-languages-children/

24 https://study.com/academy/lesson/first-language-vs-second-language-acquisition.html

25 Bhela, B., 1999. Native language interference in learning a second language: Exploratory case studies of native language interference with target language usage. https://openjournals.library.sydney.edu.au/IEJ/article/download/6747/7392#page=26

26 https://mangolanguages.com/resources/learn/general/how-to-learn-a-language/science-behind-language-learning/4-key-differences-between-first-and-second-language-learning

27 https://www.basic-concept.com/c/difference-between-first-language-second-language

28 https://hotpot.uvic.ca/

29 https://tinyurl.com/2x37m5zz

30 https://treasurehuntproject.eu/download/pr4-training-package-on-agrotourism/

31 https://medium.com/age-of-awareness/why-being-obsessed-is-the-only-way-to-achieve-your-goals-6702861d35b2

32 https://medium.com/@MillennialHero/why-following-your-obsession-will-genuinely-make-you-more-successful-9df670f5e8b7

33   Anderman, E. M. and Dawson, H. 2011. The Intrinsic/Extrinsic Motivation Debate. Chapter 11: Learning with Motivation. In: Handbook of Research on Learning and Instruction. Mayer, R. E. and Alexander P. A. (eds.). Taylor & Francis, New York, NY. pp: 219-241.
      (https://www.researchgate.net/profile/Hadley-Solomon/publication/257947063_Learning_with_Motivation/links/574b189408ae2e0dd301a04c/Learning-with-Motivation.pdf)

34   "a range of formal and informal assessment procedures conducted by teachers during the learning process in order to modify teaching and learning activities to improve learner academic performance". Wikipedia: formative assessment. Last accessed: 6/7/2024.

      Bennett, R.E., 2011. Formative assessment: A critical review. Assessment in education: principles, policy & practice, 18(1), pp.5-25.

      Black, P. and Wiliam, D., 2009. Developing the theory of formative assessment. Educational Assessment, Evaluation and Accountability (formerly: Journal of personnel evaluation in education), 21, pp.5-31.

      Popham, W.J., 2006, September. Defining and enhancing formative assessment. In Annual Large-Scale Assessment Conference, Council of Chief State School Officers, San Francisco, CA.

35   for example, https://cd.oikothesis.org/lesson/Know-your-customer-23#Exercises

36   https://cd.oikothesis.org/home-page-1 #Award-winning training tool

37   https://www.crauswords.com/

38   https://www.youtube.com/watch?v=i4w521XBsQQ

39   https://en.wikipedia.org/wiki/Machine_learning

40   For example, Google Translate (https://translate.google.com/), Microsoft Translator (https://www.bing.com/translator), DeepL (https://www.deepl.com/en/translator), etc.

41   In 2020, a Greek Minister of Education was forced to resign for not checking machine translated manuals and escaped transliteration sequences.

42   In the US, the term "learning coaches" refers to individuals cooperating and helping professionally school teachers to achieve their class achievement goals. For the purposes of the TREASUREHUNT project, the term "learning coaches" refers to teachers advising, teaching or "coaching" project Target groups.

43   https://learnenglishteens.britishcouncil.org/skills

44   http://hotpot.uvic.ca/

45   A Google search for "Hot Potatoes" resulted in 4.65 million hits; last access: 17/11/2023.

46   For Hot Potatoes example exercises, visit https://hotpot.uvic.ca/wintutor7/tutorial.htm # The Potatoes, one by one.

47   https://cd.oikothesis.org/media/source/Teacher%20Training/How%20to%20construct%20your%20own%20exercises%20and%20tests/How%20to%20construct%20your%20own%20exercises%20and%20tests-formatted.pdf

48   https://www.educationcorner.com/study-location/

49   https://www.nytimes.com/2010/09/07/health/views/07mind.html

50   Anki (https://apps.ankiweb.net/) is a great free, open source and highly customizable tool for spaced repetition. Essentially, it is a flashcard simulation that greatly improves memory retention. It can be used to remember anything, anywhere. Runs of Windows, Mac and Linux. Download from: https://apps.ankiweb.net/#Downloads

51   See Appendix 4 – Good writing practices.

52   https://amp.theguardian.com/sport/2023/may/31/scripps-national-spelling-bee-international

53   For some general ideas on how to teach vocabulary, visit https://www.nytimes.com/2021/10/19/learning/live-webinar-teaching-vocabulary-with-the-new-york-times.html?pgtype=Article&action=click&module=RelatedLinks

54   Daily or weekly rotation or randomized order, but always keeping the 4+1 number of skills per day

55   Appendix 3 – AI enhancements

56   https://www.usa.edu/blog/study-techniques/,

      https://www.futurelearn.com/info/blog/top-study-tips-for-effective-learning,

      https://greator.com/en/learning-tips/

https://www.vu.edu.au/about-vu/news-events/study-space/10-tips-on-how-to-study-effectively

57 https://www.nytimes.com/2010/09/07/health/views/07mind.html

58 https://www.youtube.com/watch?v=tkm0TNFzIeg

59 https://www.youtube.com/watch?v=q-16DPh_VWw

60 https://www.forbes.com/sites/quora/2017/11/08/what-makes-chunking-such-an-effective-way-to-learn/

61 https://www.youtube.com/watch?v=HAnw168huqA

62 http://www.chrest.info/fg/papers/Chunking-TICS.pdf

63 https://tlconestoga.ca/content-chunking/

64 https://www.verywellmind.com/chunking-how-can-this-technique-improve-your-memory-2794969

65 https://link.springer.com/referenceworkentry/10.1007/978-1-4419-1428-6_1042

66 https://www.edutopia.org/article/chunking-content-classroom/

67 https://selfcontrolapp.com/

68 https://www.focalfilter.com/

69 for example, https://www.youtube.com/watch?v=mNBmG24djoY

70 https://www.youtube.com/watch?v=5WRO79zuJ4U

71 https://www.projectlibre.com/product/1-alternative-microsoft-project-open-source

72 Adapted from Mansoor, I., 2002. Tips on searching the internet for medical information. Journal of Family and Community Medicine, 9(1), pp.57-61. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3430177/)

73 https://support.microsoft.com/en-us/office/use-the-speak-text-to-speech-feature-to-read-text-aloud-459e7704-a76d-4fe2-ab48-189d6b83333c

74 https://www.getpronounce.com/

75 Learners can also take note of the suggested video list on the right hand side of the browser.

76 Some of these tools are really impressive in that they can respond with a natural-sounding voice (including filler words, breathing between words and intonation!), or speaking in the first person-pretending they are real people-, or the answers they can provide to all sorts of hypothetical and strange questions. However, not all of these tools are currently available in all countries, and they will probably require a paid subscription to the AI tool, not just the free version.

77 https://www.youtube.com/watch?v=3mNNj_noocA

78 https://theresanaiforthat.com/s/chatbots/?sort=default

79 https://medium.com/@linguatrip/how-to-use-artificial-intelligence-to-learn-english-4dc4dccbccb

80 https://www.youtube.com/watch?v=kXChJfHZrjU

81 For a list of methods for ChatGPT voice control, visit https://www.makeuseof.com/ways-to-control-chatgpt-with-voice/

82 https://americanenglish.state.gov/files/ae/resource_files/dialogs_for_everyday_use_508.pdf

83 https://www.youtube.com/watch?v=sXOAanKbXAQ

84 https://www.youtube.com/watch?v=LzEZRvk0Bqg

85 https://www.youtube.com/watch?v=cJjsgI9sVYc

86 https://www.futuretools.io/

87 https://www.producthunt.com/

88 https://theresanaiforthat.com/

89 https://www.youtube.com/watch?v=58xKrH1-IaY

90 https://www.youtube.com/watch?v=DOGm2wmJrE0

91 https://ttsmaker.com/

92 https://www.canva.com/apps/AAFlnMQm--8/murf-ai

93 https://buzzcaptions.com/

94   https://openai.com/research/whisper

95   https://convertspeech.com/

96   https://elsaspeak.com/en/

97   https://www.speechace.com/ - instant score on subjects of: reporting on pronunciation, fluency, vocabulary, grammar scores, report generation by subject; no free trial; fixed material, no entry of other text.

98   LLM is a type of language model notable for its ability to achieve general-purpose language understanding and generation. (https://en.wikipedia.org/wiki/Large_language_model; last access: 10/11/2023). Notable examples include OpenAI's GPT models (e.g., GPT-3.5 and GPT-4, used in ChatGPT), Google's PaLM (used in Bard), and Meta's LLaMa, as well as BLOOM, Ernie 3.0 Titan, and Anthropic's Claude 2.

99   https://medium.com/mlearning-ai/the-chatgpt-list-of-lists-a-collection-of-1500-useful-mind-blowing-and-strange-use-cases-8b14c35eb ,
     https://www.semrush.com/blog/chatgpt-prompts/

100 https://www.icls.edu/blog/video-games-help-people-to-learn-a-new-language

101 Chen, H. J. H., & Yang, T. Y. C. (2012). The impact of adventure video games on foreign language learning and the perceptions of learners. Interactive Learning Environments, 21(2), 129–141.
     https://doi.org/10.1080/10494820.2012.705851

102 https://quizlet.com/

103 https://qz.app.do

104 https://www.merriam-webster.com/games

105 https://www.facebook.com/games/instantgames/category/?category=953400792157137&store_visit_source=categories_lhc

106 https://www.fluentu.com/blog/english/games-to-learn-english/

107 https://en.wikipedia.org/wiki/The_New_York_Times_Games; last accessed: 19/06/2024

108 https://games.washingtonpost.com/category/word

109 https://www.latimes.com/games

110 https://www.nytimes.com/puzzles/spelling-bee

111 https://www.theguardian.com/crosswords

112 https://www.theguardian.com/commentisfree/2023/feb/14/how-am-i-spending-early-middle-age-playing-phrazle-and-other-mesmerising-word-games

113 https://www.theguardian.com/games/2022/feb/28/worldle-sweardle-byrdle-a-guide-to-the-maze-of-word-game-apps-that-arent-wordle

114 https://americanenglish.state.gov/files/ae/resource_files/etf_54-4_pg14-23.pdf

115 Odo, Dennis Murphy. "Crowdsourced Language Learning: Lessons for TESOL Educators from Online Language-Learning Enthusiasts." English Teaching Forum. Vol. 54. No. 4. US Department of State. Bureau of Educational and Cultural Affairs, Office of English Language Programs, SA-5, 2200 C Street NW 4th Floor, Washington, DC 20037, 2016. (https://americanenglish.state.gov/files/ae/resource_files/etf_54-4_pg14-23.pdf)

116 A Wright, D Betteridge, M Buckby (2006) Games for language learning. p. 11 (books.google.com)

117 For instructions on how to make matching exercises using the JMatch application of Hot Potatoes, visit https://hotpot.uvic.ca/wintutor7/tutorial.htm # Introduction to JMatch (matching exercises),
     https://hotpot.uvic.ca/hotpot7_help.pdf p. 28,

     For an example of Matching Exercise, visit https://hotpot.uvic.ca/wintutor7/jmatch2.htm.

     To see how the scoring works for JMatch, visit https://hotpot.uvic.ca/hotpot7_help.pdf, p. 32, "How does the scoring work in the other applications"

     For help, click on the Help menu.

     In addition, see https://hotpot.uvic.ca/hotpot7_help.pdf, JMatch section, p. 28

118 For help, click on the Help menu.

In addition, see https://hotpot.uvic.ca/hotpot7_help.pdf, JCloze section, p. 23

119 The audio files must be in the same directory as the source (.jmt) files.

120 In JMatch, click on Insert > Link > Link to a Local File. Make sure that the .mp3 files and the Hot Potatoes source file are in the same directory.

121 In JCloze, select the term and hit the "Gap" button.

122 To create a link to an .mp3 file, in an empty space of the JCloze input window, click on Insert > Link > Link to a Local File and select the .mp3 file. Make sure that the .mp3 files and the Hot Potatoes source file are in the same directory.

Select the link and move it to the "Exercise subtitle:" or the "Instructions:" pane.

123 https://TreasureHuntproject.eu/

124 The learning-by-raw-power way is to replay the same paragraph until learners have learned it by heart and they can recite it without looking at the text. However, this may not be necessary and learners are expected devise more efficient learning ways. For example, learners can invent jokes to help them memorize the text.

125 For instructions on how to make multiple choice question exercises in Hot Potatoes using JQuiz, visit

https://hotpot.uvic.ca/wintutor7/tutorial.htm # Introduction to JQuiz (question-based exercises) and click through Go!Three steps in making an exercise, etc.

For an example of a quiz made with JQuiz, visit https://hotpot.uvic.ca/wintutor7/jquiz1.htm, and to see examples of all four JQuiz question types, visit https://hotpot.uvic.ca/wintutor7/jquiz2.htm

To see how the JQuiz scoring works, visit https://hotpot.uvic.ca/hotpot7_help.pdf, p. 32, "How does the scoring work in the other applications"

126 Homophones are two or more words that sound alike, but have different meanings and spelling; for example, *new* and *knew*, *hair* and *hare*, etc.

Rhyming words are words that have similar sounding endings; for example, *gravel* and *travel*, *light* and *flight*, etc.

Obviously, there are many more rhyming words compared to homophones.

127 To find homophones, rhyming words, etc. visit the following sites and search for "Find rhymes"

https://www.rhymezone.com/r/rhyme.cgi?org1=syl&org2=l&typeofrhyme=sim&Word=business

https://www.rhymezone.com/r/rhyme.cgi?Word=Stick&org1=syl&org2=l&org3=y&typeofrhyme=sim

http://www.singularis.ltd.uk/bifroest/misc/homophones-list.html

https://www.merriam-webster.com/grammar/homophones-vs-homographs-vs-homonyms

https://accenteraser.com/blog/homophones/

https://www.onelook.com/

128 For an example of a mixed-up word exercise made with the JMix program of Hot Potatoes, visit https://hotpot.uvic.ca/wintutor7/jmix1.htm and https://hotpot.uvic.ca/wintutor7/jmix2.htm

For instructions on how to make exercises with JMix, visit https://hotpot.uvic.ca/wintutor7/tutorial.htm and click on "Go! JMix (jumble exercises)".

For the scoring algorithm of JMix exercises, visit https://hotpot.uvic.ca/hotpot7_help.pdf, p. 32, "How does the scoring work in the other applications?"

129 In principle, this is a similar exercise to the Letter soup one. For Help, see footnote 132, below, and substitute "letter" with "word" and "word" with "sentence".

130 WebSequitur is part of the TexToys suite. Download TexToys from http://www.cict.co.uk/textoys/sequitur.php and install in on your PC

131 For some tips & rules for answering IELTS essay questions, visit https://www.youtube.com/watch?v=yle3Wytf_LE, https://www.youtube.com/watch?v=yvt8RzGNhBc, etc.

132 In JCloze, select the term and hit the "Gap" button.

133 For example, Agritourism and Agrotourism

134 https://cd.oikothesis.org/media/source/Teacher%20Training/How%20to%20use%20the%20extra%20material/How%20to%20use%20the%20Extra%20Material-formatted.pdf

135 https://treasurehuntproject.oikothesis.org/

136 In JCloze, select the term and hit the "Gap" button.

137 The lack of Clues, such as definitions or other term identification, makes this a hard test to take. Learners preparing their own Games and learning coaches preparing the Games for students may want to amend this and add additional information, such as Clues, to make the test easier.