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## PERSONALISING EFL COURSES FOR ONLINE LEARNING

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**Abstract:** Over the recent decades, we have witnessed a considerable shift in an EFL (English as a foreign language) lesson from a teacher-centered to a student-centered one. This change can be attributed to the concept of personalised learning and teaching, which led to the relevancy of the study. The paper aims to describe the main principles of the course development and analyse how a personalised approach is realised in the new General English course from Skyeng online school. The author describes some general principles applied to the course modelling: the type of the syllabus, main andragogical principles, and principles of effective language learning. The paper analyses what personalised learning is from the point of view of both: a teacher and a learner. In the results and discussion section, a description is provided of how the personalised approach works on the level of the whole course (the system of obligatory and optional lessons, 3 different studying tracks, the choice of the homework volume, the choice of the tests and exams for the student) and on the level of the lesson modelling (various lesson patterns, extra slides for additional practice). The author also analyses her research, which shows that teachers do not tend to be flexible when choosing the lesson materials and prefer the linear lesson track without changing the combination of lesson slides. This proved the need for such lesson models in Skyeng online school which would be designed to be quite flexible in their structure. The represented approach to modelling a language course can be viewed as quite innovative and up-to-date and has proved to be effective.

**Keywords:** personalisation, online learning, online teaching, instructional design, online language course for adults, EFL e-course.

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## 1. INTRODUCTION

Design of an e-course in a language is based on almost the same principles as that of an offline language course. It starts from choosing the main approaches and principles that will shape it. This will guide the choice of how to teach, what to teach and how to sequence it. That is mainly the syllabus of the course: a plan of what is to be achieved through our teaching and our students' learning. In communicative language teaching context there are 6 main types of language teaching syllabi: a structural syllabus, notional syllabus, situational syllabus, skill-based syllabus, task-based syllabus and a content-based syllabus [Krahnke, 1987].

These types rarely occur independently of each other. Almost all syllabi are combinations of two or more of the types. In our paper we describe Skyeng New General English syllabus, which can be viewed as a combination of a skill and a content-based syllabi as the main goal of the instruction is not only to teach the specific language skills, but also to teach some content or information using the language that the students are learning, which is typical of the content-based syllabus [Richards & Rogers, 2016].

The next aspect to consider is the principles applied to adult learning. Malcolm Knowles pioneered the study of adult learning (called andragogy) in the 1970s, identifying six adult learning principles:

- Adults are internally motivated and self-directed;
- Adults bring life experiences and knowledge to learning experiences;
- Adults are goal oriented;
- Adults are relevancy oriented;
- Adults are practical;
- Adult learners like to be respected [Knowles, 1970].

While designing our Skyeng New General English course for adult learners we made an attempt to apply these principles practically. We recognize, that in the course adult learners should have *a feeling of control over their learning*, some options to move around the course freely. The instruction designers should allow the use of learners' pre-existing experiences when introducing them to the new topic, set clear learning objectives, bring focus on the practical level of the course and show the relevance of what the adults learn to their own experience and needs.

Besides, as we cater not only for adults but for senior learners (aged 60 and above), we have to remember that some new studies suggest that mental activity, including learning languages, can offset the effects not just of degenerative diseases, but of normal aging as well [Bak et al, 2014; Bialystok, 2004; Paul, 2012; Schweizer et al., 2012].

In addition to this we have also derived the main principles of encouraging language learning which, according to extensive research, include the importance of repetition, thoughtful processing of material, the principle related to learners' attitudes and motivation and the principles of individual differences and learning styles or preferred modes of learning. The latter is one of our main goals for the present course, which we intended to achieve by making the course a highly personalised one.

What is personalised learning at its core? The International Bureau of Education in UNESCO (the United Nations Educational, Scientific and Cultural Organization) defines personalised learning as "teaching and learning that is focused on the background, needs, potential and perception of the learner, a learner-centered education" [UNESCO. Training tools, 2017].

What does it mean to put the learner at the center of education? Broadly speaking it implies adjusting the learning process to the needs, abilities, talents and interests of each student and allowing

a student to make a choice and gain more control over their learning process. It is natural that each student learns in a different way or at a different pace, which makes personalized learning the best instruction method. The course is no longer the fixed body for everyone, but a highly flexible unit which can be adapted to each student's needs and interests, their learning curve and expectations. At the same time the lessons are still aligned to the grade and standards of the level [Konobeev et al., 2020].

The educational process involves both the learner and the teacher. The student is made to take full ownership of their own learning process and the role of a teacher is not merely broadcasting information or replicating the exercises from a textbook. Their main responsibility is to choose the learning resources that will provide for a more effective knowledge acquisition, to help students set personal goals and create a learning plan in accordance with the latter.

The blend of education and technology (EdTech) has provided excellent ways to incorporate personalised learning and instructional design. EdTech companies view personalised learning as a means to enhance people's life learning abilities as well as develop certain competences, soft skills, critical and creative thinking. With the help of technology, learning and teaching processes are changing, becoming more tailored to each student's needs and interests. Technological tools make the implementation of this approach much easier. As educator Mary Ann Wolf observes: "Personalized learning requires not only a shift in the design of schooling, but also a leveraging of modern technologies. Personalized learning is enabled by e-learning systems which help dynamically track and manage the learning needs of all students... everywhere at any time, but which are not available within the four walls of the traditional classroom" [quoted in Leustig, 2020].

## 2. PERSONALISING ONLINE COURSES: PUTTING THEORY INTO PRACTICE

### 2.1. Modelling a personalised course of General English in Skyeng

Skyeng is one of the largest online schools in Europe and has been focusing on teaching English for more than a decade. Now it is a multiproduct EdTech company which provides courses for various ages and various purposes starting from Maths to Computer programming, although teaching English still remains the company's main focus. Skyeng has developed its own interactive digital platform Vimbox, which works for teachers and students and makes it possible both to use their own teaching materials and to fully rely on the plethora of English courses and materials developed by instructional designers in Skyeng.

Let us review the newest Skyeng New General English course for adult learners, which started in 2020 to explore Skyeng personalisation model. Below is the description of how the personalised approach is implemented in the course and lesson development. The whole study was based on the analysis of the teachers' behaviour in choosing a course route.

#### 2.1.1. Course structure: tools for personalisation

The New General English course at all levels (from Beginner to Advanced) allows flexible learning tracks for the students, because they contain **obligatory** and **optional lessons** within their units and sections. Obligatory lessons contain the main grammatical focus of the level as well as the main topical vocabulary of the unit. The obligatory materials have been selected in such a way as to ensure development of the main skills of each level according to CEFR (the Common European

Framework of Reference for Languages). While selecting language content for the courses, materials writers were guided by a number of tools, such as Cambridge English Profile, Global Scale of English, etc. Optional lessons provide additional exercises to revise the obligatory grammar topics, additional practice of productive and receptive skills and additional material on the topic of the unit to discuss and enlarge content knowledge. For example, the Intermediate level consists of 30 obligatory and 30 optional lessons. Every even (2, 4, 6, 8, etc.) lesson is an optional lesson. The structure of the course is schematically shown in Figure 1 below.



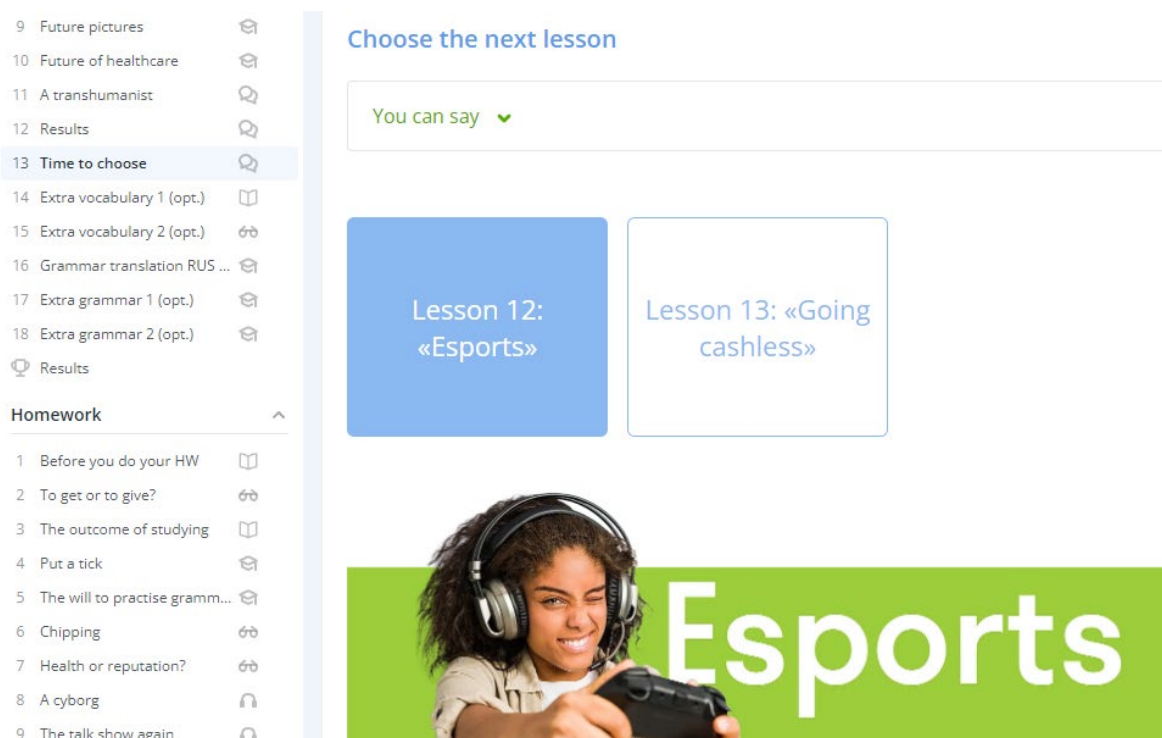
**Figure 1. The Structure of the New General English Course (Intermediate Level)**

For Pre-Intermediate and Advanced levels, the structure is slightly different, although it follows the same model. Every fourth lesson of the unit is an optional one. In the Pre-Intermediate optional lessons, the students revise the unit's grammar and vocabulary with special attention to the more challenging points. In the Advanced level the optional lessons allow the student to revise and memorize the vocabulary and grammar learned in the previous lessons, and also to expand the vocabulary with phrasal verbs, idioms and collocations related to the topic of the unit. The structure of the courses is schematically shown in Figure 2 below.



**Figure 2. The Structure of the New General English Course (Pre-Intermediate and Advanced Levels)**

The choice of the next lesson is delegated to the student. There is a special slide in the lesson (see Figure 3) which enables the student to read the teasers of the proceeding lessons and choose whether to study the optional lesson or to proceed to the next obligatory lesson. It is a means we use to make the student take certain ownership of their learning process, choose the learning materials which make sense to them, are relevant and make them want to find out more.



**Figure 3. A Slide with Teasers Describing the Proceeding Lessons of the Course**


The structure of obligatory and optional lessons guarantees flexibility of the whole course. We assume that there can be 3 different studying tracks:

- simple (covering only obligatory lessons and core skills of the current level);
- full (covering all the lessons of the course and as a result providing a confident move to the next level);
- flexible (covering obligatory and optional lessons according to the student's interests).


The teacher's role is *to assist the student to choose the best learning track* from the first lessons of the level and *to revise the goals and progress of the student regularly* to make sure the learning path of the student has not changed – or, if it has changed, to help the student adjust the track. Such course structure does allow the student to make informed choices in their learning experience. Not only does it contribute to personalization, but it also provides the students with self-advocacy skills, which will serve them throughout their lives.

### **2.1.2. Personalising the amount of homework**

When modelling a course, we also focus on personalized homework. New General English course is aimed at adult learners who do not always have enough time for the standard required amount of homework. For this reason, we provide 3 options of homework amount for the students of the course. At the end of the lesson, they may choose the 15/30/50-minute homework. 15-min-

Teacher's notes 

**Stage aim:** to **personalise** the **homework** and **motivate** the student to **do** it properly; to let the student **choose** the **next lesson**.

You can say 

Let's look at the homework tasks you can get.

Decide how much homework you'd like to get

15

30














50

This page is not included in homework

Dictionary Grammar

HW Plan 33% Notes Words


**Homework**

- Before you do your home... 
- Unit vocabulary: Revision 
- Unit grammar: Revision 
- Biohacking doctor 
- Quite tricky 
- Vocabulary enhancement 
- Get ready to listen 
- Is it worth it? 
- Delve deeper 
- Exciting or terrifying? 
- Deciding vote 
- More about the topic 
- The next lesson 

Send Homework

Quite challenging, but definitely doable.

- 30 minutes of decent English language practice.
- You'll revise all the lesson material.
- Steady progress is almost guaranteed.

Teacher's notes 

Send these slides as homework:

- Before you do your homework — Reading — 0 min.
- Unit vocabulary: Revision — Vocabulary — 4 min.
- Unit grammar: Revision — Grammar — 5 min.
- Biohacking doctor — Grammar — 5 min.
- Vocabulary enhancement — Vocabulary — 5 min.
- Exciting or terrifying? — Reading — 5 min.
- Deciding vote — Writing — 7 min.
- More about the topic — Reading — 0 min.
- The next lesson — Reading — 0 min.

Figure 4. The Slide with the Teacher's Notes Section

ute homework includes mainly 2-3 tasks on revision of the lesson grammar and vocabulary. When making this choice, the students are warned by the system that it will only enable them to revise vocabulary and grammar, but will not help to make significant progress. 30-minute homework also includes a listening or/and a reading task on the lesson topic and an obligatory production task on writing or speaking. When choosing this option, students are informed that only some progress can be made. 50-minute homework is developed for students who choose the full learning track and it covers all the receptive and productive skills development and contains about 9-10 tasks. There is a clear explanation to the students what effect this choice might have on their progress: whether they will have a profound practice and master language skills, have only the necessary additional practice of the skills they worked on during the lesson and progress slower or they will have just a brief overview of only target grammar and vocabulary.

These recommendations are written for the teacher in the special Teacher's notes section (see Figure 4). There are detailed lists of slides with skills explanations for each volume of homework.

### *2.1.3. Other ways to personalise a course*

The flexible structure of our New General course necessitates certain changes in the criteria and the system of assessment. The general assessment in the course is implemented through mini-tests, progress tests, midterm exams and final exams. Mini-tests are designed for the revision of the unit (4 lessons); progress tests are developed to measure the student's progress after the section (8 lessons); midterm exams and final exams are held after the completion of half of the course and the whole course accordingly. Our approach of obligatory and optional lessons and different studying tracks called for the need of 2 options for all the tests and exam types. Thus, we have developed the simple and full versions for these progress checkpoints. **Full** versions of tests and exams (mini-test full, progress test full, final exam full) cover grammar and vocabulary studied in all the lessons of the unit/section/course. **Simple** versions (mini-test simple, progress test simple, final exam simple) cover grammar and vocabulary of merely obligatory lessons of the unit/section/course.

An optional midterm exam lesson has also been developed for every level of the New General English. These exam lessons are aimed at the students who want to check their progress in the middle of the course and get acquainted with the structure of the final exam.

## **2.2. A personalised lesson model**

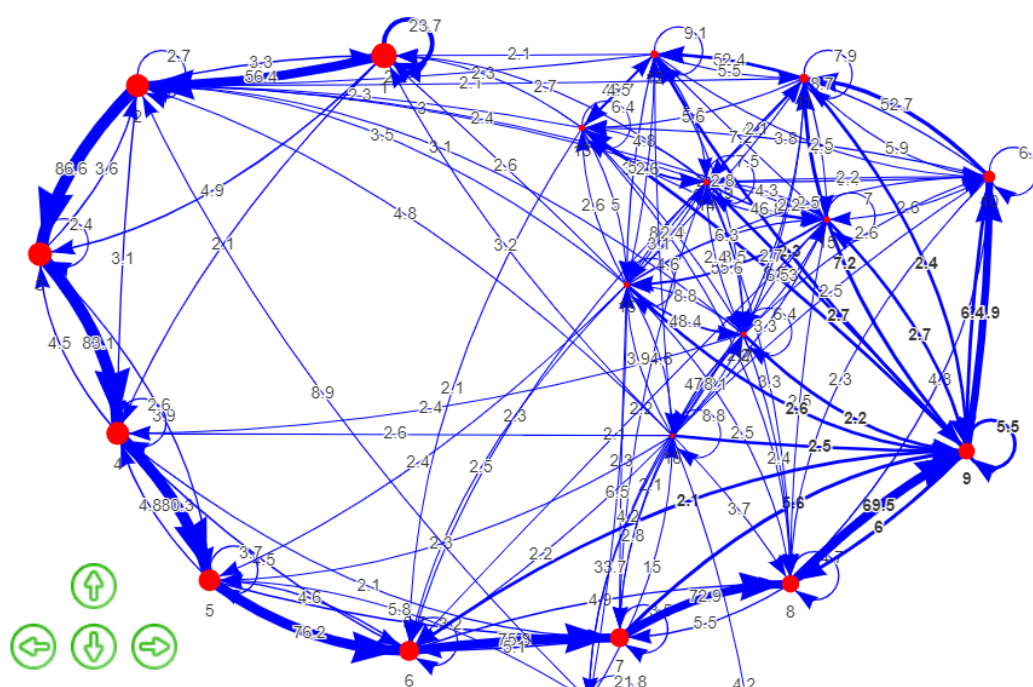
We have described the roles of a teacher in the personalised learning process. Thus, we can assume that personalisation itself lies within the teacher's responsibility. The teacher should be able to make the language learning relevant and motivating for a student. What about the course materials? Is there any way to make the content more personal to help the teacher set this personalised environment during their classes? The instructional designers of the New General course are attempting to model the lesson materials, which will enable the teacher to do it.

### *2.2.1. Lesson track statistics as basis for development*

First, we have studied how teachers and students behave in the **lesson track**. Most of the EFL lessons on the Vimbox platform have a linear structure and are composed of 9-14 slides (which can be exercises, activities or explanations). They are shown to the student and the teacher in the form of a lesson plan. The lesson starts with the first slide automatically and further the teacher may

choose any slide to continue the lesson. They can skip some slides and even open the slides of the homework during the classwork if any explanations, demonstrations or assistance is needed. The slides are ordered according to the instructional designer's plan for the lesson. They correspond to certain purposes and language skills developed accordingly, to the scenario of the lesson implied by the content producer. However, teachers have teachers' notes for each lesson, in which they are informed about what else they can do or say, and on the whole, they are informed of the opportunities of being flexible and of adjusting the flow of the lesson to the student. We intended to find out how the student and the teacher mix the slides, whether they follow the linear structure of the lesson or it is a common practice for the Skyeng teachers to choose their individual track and thus personalise the materials. With the help of the data analysts' team, we have found out that most of the teachers choose to follow the designed plan of the lesson and they move from slide to slide in a linear way without adjusting the materials to the student's needs.

Figure 5 below represents the slides of the lesson and the way teachers shift from slide to slide, which is reflected in the percentage of teachers choosing this or that lesson track, shown with the help of arrows.



**Figure 5. The Slides of the Lesson and the Number of Teachers Choosing Particular Lesson Tracks (in %)**

There is a vivid blue arrow which shows how many shifts have been recorded between the slides within the lesson. The first slide of the lesson is a checkpoint where the teacher and the student check and discuss homework. This slide is often skipped, thus we do not record the first main shift between the second and the third slides of the lesson plan. The further trajectory is also **linear** and it continues mainly as far as the ninth slide of the lesson. The width of the arrow represents the percentage of the teachers following the lesson track. By the 10th slide it becomes narrower. The narrower arrows between the points represent the percentage of the teachers who shift to other lesson slides different from the next one. For instance, only 2.6% of the teachers shift from the 4th to the 9th slide of the lesson (compared to 80.3% who switch from the 4th to the 5th).

The general numbers of how the teachers shift between the lesson slide numbers is represented in the chart below.

**Chart 1. The Number of Teachers Choosing the Linear Lesson Track (in %)**

Nº Slide	% Teachers Shifting
1-2	56%
2-3	86,6%
3-4	83,1%
4-5	80,3%
5-6	76,2%
6-7	75,8%
7-8	72,9%
8-9	69,5%
9-10	64,9%

The main conclusion is contrary to our expectations that teachers use materials to adapt their order to students' needs: most teachers prefer to follow the plan of the lesson and **do not vary** the materials, and thus do not personalise the lesson according to their students' needs or interests. The flexibility of teachers is lower than that of students. Therefore, we use a number of tools to encourage students to make informed choices within the lesson and the course and to motivate teachers to allow for it. Within the lesson students get information about the types of the materials, which exercises are compulsory and which ones are optional, and how much homework they can choose, but it is important to model the lesson structure and content in such a way, as to allow flexibility for both the student and the teacher.

### ***2.2.2. Modelling lesson content to allow personalisation***

Having received the statistical data, we focused on providing the teachers with such lesson materials that will enable them to vary their teaching tracks within every lesson of the course, and so to make it possible to personalise not only the whole course but each lesson within the course frame.

The first stage to develop a lesson is to choose the content of the lesson according to the topic and the grammar focus in the roadmap of the course. We usually choose 2 content units for the lesson and 2 for the homework assignment. These are either the texts for reading or listening or video content. It is often the case that we have to compile some articles and other resources into a draft variant of a content unit which the native writers later rewrite and proofread. Thus there is a certain *fixed framework* for the *draft* of the lesson: lead-in, a reading task, a listening task and a production stage of the lesson for freer speaking. The rest of the lesson stages will be added according to what grammar and what vocabulary we want to work on during a particular lesson.

This fixed framework gives the opportunity to the instructional designer to scaffold *different options* for the teacher who will work on this lesson materials. They will design such steps in the lesson which could be *differently combined*, *skipped* or which would function as *additional practice* for certain skills.

From lesson to lesson we provide vocabulary practice steps (=stages), grammar presentation, eliciting and practice steps, reading and listening steps, pre-reading or pre-listening discussion steps and a production step (speech production activities) for freer practice of the target grammar or vocabulary. The whole number of the stages can vary from 12 to 18 (comprising extra practice steps).

The extra slides of the lesson are always optional and they are included into the main plan of the lesson and marked as a means of additional practice on vocabulary, grammar or speaking. Usually there are about 4 such additional slides, they are put at the end of the lesson plan and marked as OPTIONAL. At the same time the teacher sees the student's progress as it is measured automatically for each language skill according to the accuracy and number of exercises devoted to this skill and topic, done by the student. Such structure and information on the student's progress enables the teacher's flexibility and a personalised approach to each student's underdeveloped skills, preferences and aims. Let us consider examples of how this possibility of personalised lesson tracks can be practically realised.

The example below is taken from the New General English Advanced level course, Unit 3 "Feelings", Lesson 11 "The theory of happiness". Here is the plan and the aims of the lesson. It consists of 16 lesson slides which comprise vocabulary, grammar, reading, listening and speaking tasks.

The screenshot shows a digital lesson plan interface. At the top, there are icons for 'HW', 'Plan', '0%', 'Notes', and 'Words'. Below this is a 'Lesson' section with a list of 16 items, each with an icon indicating its type (e.g., speech bubble for speaking, book for reading, headphones for listening). The items are: 1 Checkpoint, 2 Being sad on cloud ni... (with a 'Preview' link), 3 What's the formula?, 4 A Japanese secret, 5 A lofty goal, 6 A word quiz, 7 Correct the words!, 8 Discover conditionals, 9 Suppose you forgot, 10 Don't miss practice!, 11 What is your secret?, 12 Results, 13 Time to choose, 14 Extra vocabulary (opt.), 15 Extra grammar (opt.), and 16 Speak out (opt.). To the right of the list is a large green box containing the lesson description and objectives.

In this lesson, you will find out about different theories which try to make sense of happiness and its components. You will learn about the differences between Western and Eastern philosophies of happiness and will try to formulate your own keys to happiness. Besides, you will revise how to use all types of conditional sentences and practise using the alternatives to *if* in such sentences.

**Lesson objectives:**

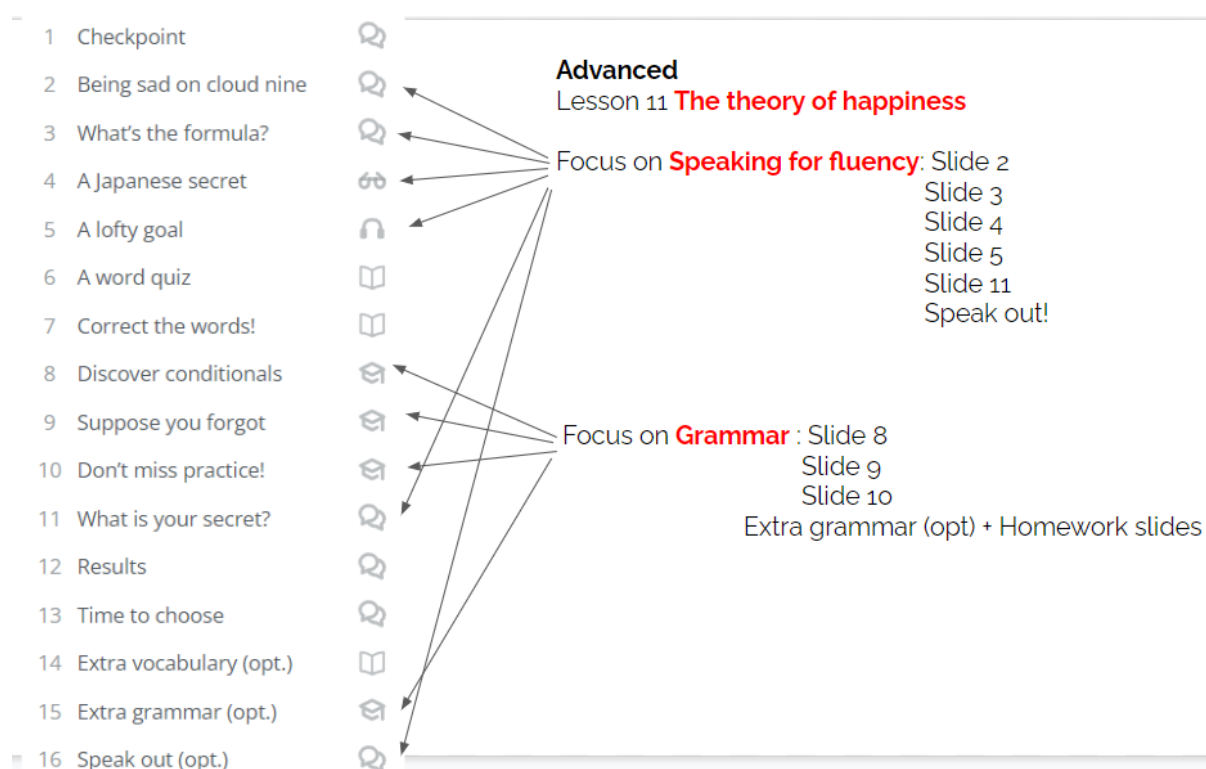
- to **talk** about different theories of happiness;
- to **enrich** vocabulary related to the topic of feelings;
- to **learn** how to talk about hypothetical events and actions and their possible consequences;
- to **practise** conditionals and alternatives to *if*.

**Figure 6. A Sample Slide from the New General English Advanced Level Course**

So how can a teacher form a personal track for the student who has below average speaking skills but has made more progress in grammar or vice versa? The arrows in the slide below (see Figure 7) show which steps of the lesson a teacher may choose 1) to shift the focus of the lesson to speaking for fluency for the student whose speaking is rather poor and who has to develop this skill better, 2) to shift the focus of the lesson to developing grammar skills of the student who is good at speaking and receptive skills, but who underscores at grammar.

For example, when focusing on speaking for fluency the system recommends to do a lead-in task, a pre-reading discussion, a reading and a listening task with the shift to post-reading and post-listening discussion, a slide with the productive task (creating your own formula for happiness) and an extra slide for speaking on the lesson topic. Thus, the student will have enough speaking practice during the lesson. The rest of the slides can be sent as homework or skipped.

To cater for the needs of the student who underscores at grammar and makes grammar a priority the teacher may choose only grammar slides from the lesson plan and combine them with the slides from the homework slides set.



**Figure 7. A Sample Slide from the New General English Advanced Level Course**

### 3. CONCLUSIONS

There are numerous ways to implement personalised learning principles within the framework of the online language course. This can be achieved not only by delegating the responsibility to personalise the learning process to the teacher, but can start at the stage of the very course and lesson development. The example of the New General English course for adult learners in Skyeng describes how:

- to develop a **personalised syllabus structure** (combining the characteristics of content and skill-based syllabi);
- to design such a lesson structure as **to personalise the choice of the materials** needed for a particular student, relevant to their underdeveloped skills, interests or preferences;
- to make it possible for the student **to choose the amount of homework**;
- to implement the **personalised assessment** and progress check in the course structure;
- to **consider behavioral patterns** of teachers to support personalised learning;
- to allow students to act **in accordance with their learning needs** when constructing the learning process.

We assume that the model can be applied not only to design an online language course but is supposed to aid development of any studying materials meant for adult learners.

### Conflict of interest

The author declares there is no conflict of interest.

## REFERENCES

1. Herold, B. (2018). *What does personalized learning mean? Whatever people want it to*. Retrieved from <https://www.edweek.org/ew/articles/2018/11/07/what-does-personalized-learning-mean-whatever-people.html> (accessed: 24 January, 2021).
2. *How to Use Technology to Personalise Learning*. Retrieved from <https://www.dyknow.com/blog/how-to-use-technology-to-personalize-learning/> (accessed: 10 February, 2021).
3. Bak, T. H., Nissan, J. J., Allerhand, M. M., & Deary, I. J. (2014). Does bilingualism influence cognitive aging? *Annals of Neurology*, 75(6), 959-963. doi:10.1002/ana.24158
4. Bialystok, E. (2004). Bilingualism, Aging, and Cognitive Control: Evidence from the Simon Task. *Psychology and Aging*, 19(2), 290-303. doi:10.1037/0882-7974.19.2.290
5. Bray, B., & McClaskey, K. (2014). *Make Learning Personal: The What, Who, WOW, Where, and Why*. Corwin Press.
6. *International Bureau of Education. Training Tools for Curriculum Development*. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000250057> (accessed: 10 February, 2022).
7. Konobeev, A., Yukhimuk, Y., Voytsekhovskaya, V., & Shchekich, M. (2020). Personalization as an approach to education. *Professional Discourse & Communication*. 2, 118-138. doi:10.24833/2687-0126-2020-2-3-118-138
8. Knowles, M. (1970). *The Modern Practice of Adult Education. Andragogy versus Pedagogy*. Association Press.
9. Krahne, K.J. (1987). *Approaches to Syllabus for Foreign Language Teaching*. New Jersey: Prentice-Hall Inc.
10. Leustig, T. (2020). How to use technology to personalize learning. Retrieved from <https://www.dyknow.com/blog/how-to-use-technology-to-personalize-learning/> (accessed: 10 February, 2022).
11. Morin, A. *Personalised learning: What you need to know*. Retrieved from <https://www.understood.org/en/school-learning/partnering-with-childs-school/instructional-strategies/personalized-learning-what-you-need-to-know> (accessed: 24 January, 2020).
12. Oates, T. (2018). *Individualised learning, personalised learning – just where did it come from and what does it mean?* Council of British International Schools. Retrieved from <https://www.co-bis.org.uk/blog/individualised-learning-personalised-learning-just-where-did-it-come-from-and-what-does-it-mean> (accessed: 19 January, 2020).
13. Paul, A. (2012, June 13). Want to Prevent Aging? Learn a New Language. *Medicine. Time magazine*. Retrieved from <https://ideas.time.com/2012/06/13/want-to-prevent-aging-learn-another-language/> (accessed: 21 February, 2020).
14. Richards, J.C., & Rodgers, Th.S. (2016). *Approaches and Methods in Language Teaching*. Cambridge University Press.
15. Schweizer, T. A., Ware, J., Fischer, C. E., Craik, F. I. M., & Bialystok, E. (2012, September). Bilingualism as a contributor to cognitive reserve: Evidence from brain atrophy in Alzheimer's disease. *Cortex*, 48(8), 991-996. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0010945211001043> (accessed: 10 February, 2022).

16. Training Tools for Curriculum Development: Personalized Learning. UNESCO. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000250057#:~:text=Personalized%20learning%20is%20teaching%20and,and%20perception%20of%20the%20learner> (accessed: 10 February, 2022).

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