

**Teaching specific disciplinary content within academic language provision:
collaborative risks and creative possibilities**

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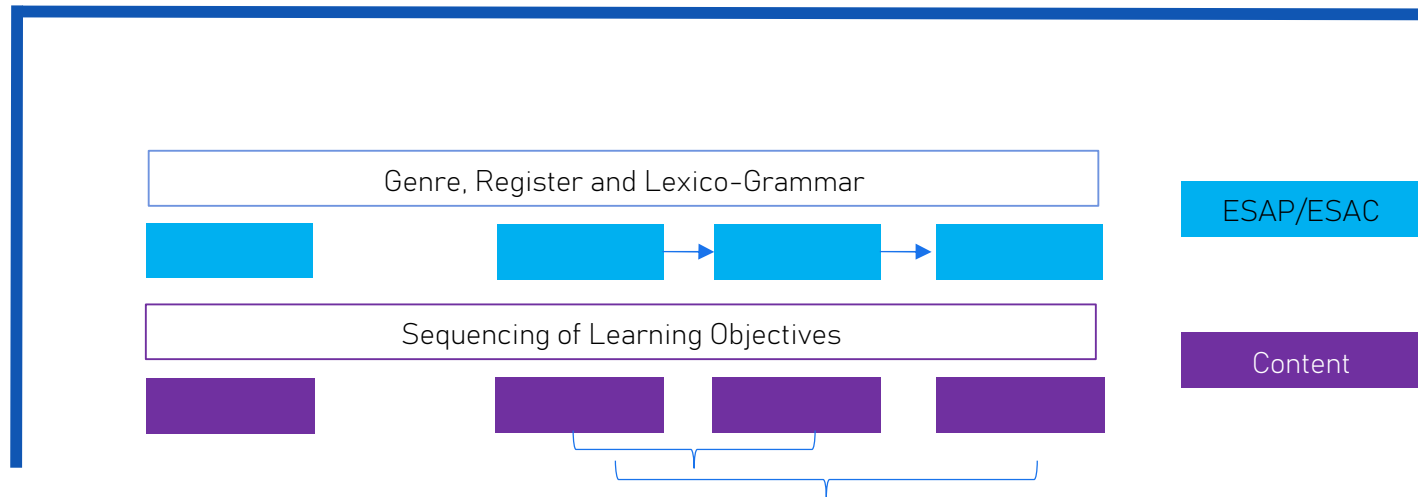
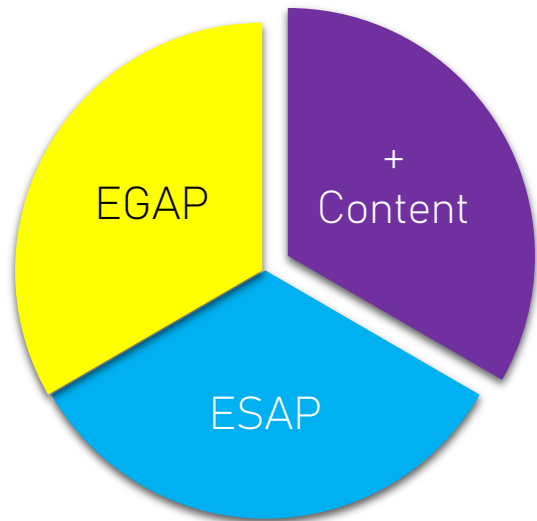
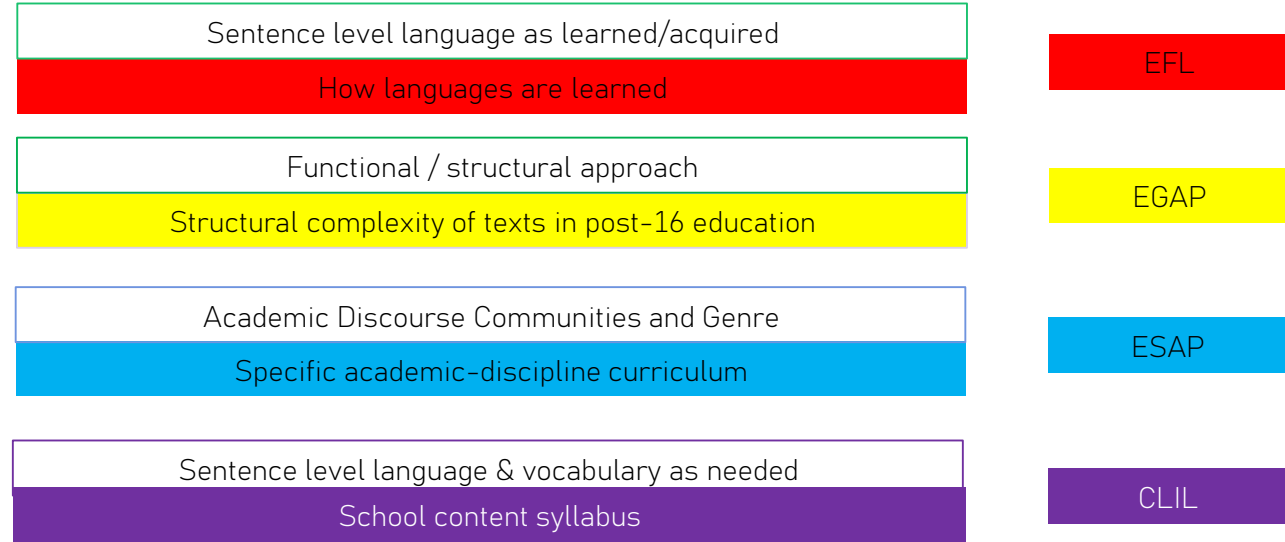
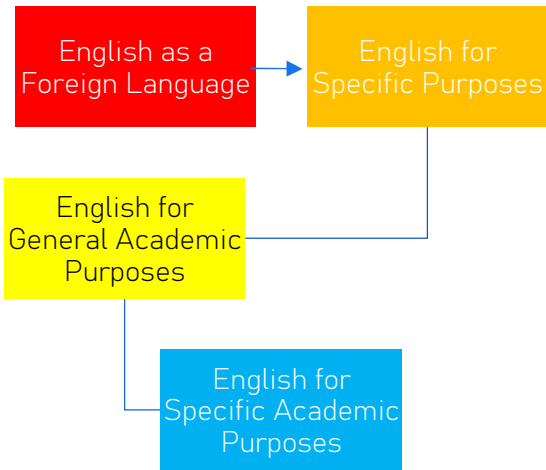
APPROACH

- Try out and think about, i.e. Critical Incident Analysis (Tripp, 2012); Reflection (Gibbs 1988)
- Three courses where I have tried to integrate content into language teaching
 - STEM Sustainability Goals
 - Analysing Language
 - Business Studies



CONCLUSIONS

- Don't fear content
- Build on, but don't get built on by, the literature (Airey 2016; Coyle, 2008)
- Roles in the Production
 1. EAP teacher – delivering EGAP or ESAP
 2. Educational linguist writing course materials
 3. Subject lecturer
 4. CLIL teacher
 5. Consultant
 6. Educationalist
- Learning Objectives and Units of Analysis
- Units of analysis for the materials
 1. Course
 2. Session
 3. Task





EAP Teacher



Materials Writer



Subject Lecturer



Education Consultant



CLIL Teacher



Education Researcher

When you read an academic text, it is not always necessary to understand every word – often the most important thing is to be able to recognize the information which is most useful to you. Visuals such as diagrams and pictures can help in the recognition and processing of key factual information. In particular, they can help you to predict the content of a text. Diagrams are also useful in extracting and recording relationships between key pieces of information in a text. In texts containing factual information, you will often find typical sentence structures for defining and describing key information. It is important to be able to recognize these, and use them in your own writing.

- This module covers:
- Understanding and extracting key factual information in a text
 - Recognizing and writing definitions
 - Summarizing key factual information in a text

TASK 1 Critical thinking – discussing reading strategies

1 Look at the diagrams showing different reading strategies. Which one represents the way you normally read a text in English?



1 Reading from left to right, line by line and every word. 2 Skimming for the general meaning in brief. 3 Scanning for specific information or details.

2 When would you use each of these strategies, and why?

3 Which of the following statements do you agree with? Work in groups and compare your answers.

- The title can help you with the general content and organization of a text.
- To understand a text completely, you must read every word.
- You can skim a text using just the 'content words'.
- If you know the purpose of a text, it helps you to read more efficiently.
- Efficient readers jump around a text and do not always start at the beginning.

TASK 2 Predicting the content of a text

1 Look at the title of the text and the pictures on page 625.

- How do the pictures relate to the title *Links in the food chain*?
- Can you identify any relationships between the different species shown in the pictures?
- Predict at least four points that might be included in the text.

2 Skim the text and check your answers to 1.

INDEPENDENT STUDY
To read efficiently, you need to be able to find your way around a text using a range of strategies. Which strategy or strategies do you use when you read newspapers?

Links in the food chain

- A food chain describes just one route by which energy passes through a community and the rate of energy transfer between some of its species. When they are consumed, the primary producers pass their energy to consumers. Consumers are collectively called secondary producers and are linked together in the food chain in a sequence of positions along the chain, called trophic levels.
- At the second trophic level are herbivores, which are species that feed directly on plants. Although vegetation is abundant, plant material often represents a poor-quality food requiring considerable investment in time and energy to digest. Consequently, the ability of herbivores to absorb energy is generally low. Some concentrate on parts of the plant that are more nutritious or more easily digested than others, such as new shoots or buds. Seed eaters, for example, consume a food rich in stored carbohydrates and oils. They benefit from an easily digested, energy-rich food high in nitrogen which would otherwise have fuelled the germination of the seed. Others have found ways of unlocking energy contained within the tough cellulose that constitutes the major part of the plant's biomass.
- Carnivores, which live on the energy in the tissues of herbivores or other animals, face other challenges. Flesh is primarily protein and fat – high-energy compounds that are easily broken down and with abundant nutrients. Compared to herbivores, carnivores have a short digestive tract, an indication of the smaller effort required to release the energy and nutrients. However, they incur other costs, most obviously those of catching and killing their prey. These are high when compared to the food-finding costs of a herbivore that eats any kind of vegetation. Additionally, meals are regularly less frequent and, for some carnivores, whole seasons may pass when their main prey is not available.
- Some feeding strategies locate consumers on more than one trophic level. Omnivores are defined as organisms which feed on both plants and animals, and the latter may include herbivores and carnivores. This means they feed at more than one trophic position, and straddle several levels. Energy flow does not then follow a simple progression along a linear food chain. The pattern becomes more complex if the consumer searches for dead animals or plants.



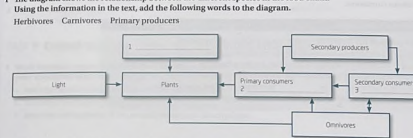
Source: Beeley, A. & Brennan, A.M. (2009), p.203. First Ecology 3rd ed. Oxford: Oxford University Press.

GLOSSARY
biomass (n) natural or living or recently dead plants
cellulose (n) substance from the cell walls of fuel (v) give energy
linear costs (n pl) to something
shoots (n) early growth of a plant
unlock (v) release or something

3 Read paragraph 1 again and note down words related to (a) the title and (b) food.

TASK 3 Understanding key information in a text

1 The diagram shows the relationship between the different species in the food chain. Using the information in the text, add the following words to the diagram.



2 Scan the text and underline the definitions of herbivores, carnivores, and omnivores. What other examples of each type of consumer can you think of?

EAP Design and Delivery

•EGAP language teaching materials – the coursebook

•Content teaching materials – the textbook

•The tests are carrier content for the EGAP learning objectives

•In using 'authentic' texts learners are engaging with content, but are outside a 'series of activities with content learning objectives' and adapted for language learning activities.

•ESAP language teaching materials = similar but more frustrating

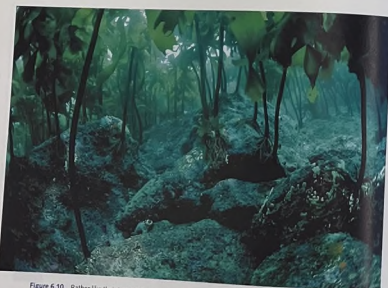


Figure 6.10 Rather like their terrestrial counterparts, the massive vertical development and multi-layering of the kelp forests off the Pacific coast of North America support a large and complex community.

TABLE 6.2 Photosynthetic efficiencies and growth rates of crops

Crop	Country	Crop growth (g/m ² /day)	Total radiation (J/cm ² /day)	Light conversion efficiency
Milze Zea mays*	USA	52	2 090	9.8
Millet Pennisetum hybridoides*	Australia	54	2 134	9.5
Sugar beet Beta vulgaris	UK	31	1 230	9.5
Millet Pennisetum purpurum*	El Salvador	39	1 674	9.3
Sugar cane Saccharum spp.*	Hawaii	37	1 678	8.4
Tall fescue Festuca arundinacea	UK	43	2 201	7.8

* C4 plants

6.3 Links in the chain

A food chain describes just one route by which energy passes through a community and the rate of energy transfer between some of its species. When they are consumed, the primary producers pass their energy to consumers or heterotrophs (literally 'nourished by others'). Consumers are collectively called secondary producers and are linked together in the food chain in a sequence of trophic levels (Figure 6.11).

At the second trophic level are herbivores, species which feed directly on plants. Although vegetation is abundant, plant material often represents a poor-quality food requiring considerable investment in time and energy to digest. Consequently, the assimilation efficiencies of herbivores are generally low (Box 6.2). Some concentrate on parts of the plant that are more nutritious or more readily digested than others, such as new shoots or buds. Seed eaters, for example, consume a food rich in stored carbohydrates and oils. They benefit from an easily digested, energy-rich food high in nitrogen which would otherwise have fuelled the germination of the seed. Others have found ways of unlocking the energy contained within the tough cellulose that constitutes the major part of a plant's biomass (Box 6.5).

Living on the energy fixed in the tissues of herbivores or other animals, carnivores face other challenges. Flesh is primarily protein and fat—high-energy compounds that are easily degraded and with abundant nutrients. Compared to herbivores, carnivores have a short digestive tract, an indication of the smaller effort required to release the energy and nutrients in their food. However, they incur other costs, most obviously those of catching and killing

their prey. These are high when compared to the foraging costs of a non-selective herbivore. Additionally, meals are invariably less frequent and, for some carnivores, whole seasons may pass when their main prey is not available.

Some feeding strategies locate consumers on more than one trophic level. Omnivores feed on both plants and animals, and the latter may include both herbivores and carnivores. This means they feed at more than one trophic position, and straddle several levels. Energy flow does not then follow a simple progression along a linear food chain. The pattern becomes more complex if the consumer scavenges dead animals or plants.

We can distinguish two basic routes for energy moving through ecosystems: from herbivores to carnivores (termed a grazing food chain), and from decomposers to carnivores (a decomposer food chain) (Box 6.3). A scavenger diverts energy heading for the decomposer food chain back into the chain based primarily on herbivores. The two chains are connected every time a blackbird pulls a worm from the soil or a decomposer is eaten by a consumer from the grazing food chain. In most ecosystems, a large proportion of the primary production passes into the decomposer route. On average, only 10 per cent of net primary productivity in terrestrial ecosystems passes to the consumers of a grazing food chain. The rest, 103.5 billion tonnes globally, fuels the decomposer chain. This makes the decomposer chain the most significant route by which energy is transferred through the rest of the ecosystem (Box 6.3).

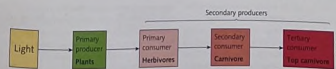


Figure 6.11 A generalized food chain—the transfer of energy down a sequence of trophic levels. Energy fixed by primary producers passes to herbivores, and then to one or two levels of carnivores.

Post- Graduate STEM



- Students streamed by discipline into STEM subject areas
- Continuation, Progression and Top-up Masters
- Language sequenced by **EGAP** objectives and materials
- Content input on Sustainable Development Goals
- Specific content accessed through student-sourced research reports
- Single set of materials with one assessment

Business Studies

- Materials sequenced by *Business Studies* Learning Objectives and coursebook
- *Language Learning Objectives* sequenced by EGAP
- Individual tasks aligned with both sets of Learning Objectives
- Two sets of assessment – language and content
- Single course written for IFY team

Chapter 1 Understanding the nature and purpose of business

Table 1.1 Introduction to business functions

Marketing	This department advises the business on consumer trends, and on the attitudes and purchasing habits of customers – and decides how to advertise and promote new and existing brands.
People (Human Resources)	Managers of the firm's staff (human resources or HR) plan for and deal with recruitment, training, financial incentives, equal opportunities and also redundancy and dismissals.
Finance	Finance helps to identify what can be afforded and therefore what budgets to set for each of the other functions; it also monitors the spending levels to make sure that costs are kept under control.
Operations	Operations manages the supply chain that starts with buying materials and components, then manufacturing a finished product and delivers it to the customer. Service businesses also need to plan the flow of work, as operations management is relevant in a bank or a shop as well as in a factory.

1.1 An overview of the subject
Business is best looked at from the boss's point of view. The boss (perhaps the founder or entrepreneur) has an idea or mission. The chief executive of Sainsbury's may decide that a chain of supermarkets in India represents the next big step forward. This is the mission – Sainsbury's succeeding in India. This can then form the basis for setting targets or objectives, such as to open the first ten Sainsbury's supermarkets in India by the end of 2018.

'Business is like a bicycle. Either you keep moving or you fall down.' John David Wright, U.S. businessman

After the chief executive has set that objective, Sainsbury's senior managers must then figure out how to make this happen. What will be needed is a strategy that leads to a plan of action, that is, to set out exactly what needs to happen, and by when. That strategy will have to involve the four main sections of the business (known as the business functions). These are marketing, people, finance and operations (see Table 1.1).

The chief executive will expect the leaders of each of these four functions to come up with their own plan for meeting the overall objective, so there will be a marketing plan, a financial plan and so on. How these things relate to each other can be seen in Figure 1.1.

Figure 1.1 How business works

Understanding the nature & purpose of business

Session 2 Profit in Wigglesworth

The measurement & importance of profit

1. Cost
2. Revenue

Profit = total revenue – total costs

Profit margin – percentage of price that is profit
Quantity sold – more sold means greater profits

- Customers believe a profitable business is a quality business
- Profitable businesses attract bank and individual investment
- Profitable businesses will attract buyers
- Profitable businesses have the confidence of their suppliers

will change as prices reduce and as prices and its competitors

AQA A-level

Business For A-level

Ian Marcous

the business and as a result they must be highly motivated. There are advantages to this form of business: they are quick to set up, and other than paying taxes, there is no need to [13] _____ the business. The people [14] _____ are free to work as they like and do not have a boss. On the other hand, there is a lot of pressure on a sole trader. There is no one else to help solve _____ cover for holidays and fill in some of the hours of work. There is also limited [15] _____ and the danger of being personal possessions if the business gets into trouble. This risk is called unlimited liability. Unlimited liability is when the [17] _____ is liable for everything the business does. So that's sole traders. The second form of business is a partnership. A company has shareholders and has a [18] _____ separate from its owners. Shareholders put a certain amount of money into the business. The shareholders cannot lose more money than they [20] _____ in the company. In other words, they have limited liability. If the business is _____ the shareholders receive dividends. Companies are a common form of business. The total [21] _____ size at the end of March 2022 was £ 4, 394, 355, an increase of 3.8 when compared with the end of March 2021. Good. We've looked at sole traders and companies. Now let's turn to a [22] _____ between types of company. Companies in the UK can be sub-divided into two _____ Public and Private. You can [23] _____ a small private limited company for about 12 in England. These companies have limited liability up to an agreed amount. A private limited company is often owned by a family and only the family can own shares. The owners are able to keep control [24] _____ the decisions in the company, often look to long-term interests and are able to collect the profits. Public limited companies sell shares to the public. These

Understanding the nature and purpose of business

What is a business? The simple answer is that it is a business that provides goods and services for other people. The business owner is responsible for the success or failure of the business. The business owner must be able to manage the business and make decisions about the future of the business. The business owner must also be able to raise capital and manage the business's finances. The business owner must also be able to market the business and attract customers. The business owner must also be able to manage the business's operations and ensure that the business is profitable. The business owner must also be able to manage the business's human resources and ensure that the business has the right people in the right jobs. The business owner must also be able to manage the business's legal affairs and ensure that the business is compliant with all relevant laws and regulations. The business owner must also be able to manage the business's risk and ensure that the business is protected from potential risks. The business owner must also be able to manage the business's reputation and ensure that the business is seen in a positive light. The business owner must also be able to manage the business's customer relationships and ensure that the business is providing a high quality of service to its customers. The business owner must also be able to manage the business's innovation and ensure that the business is staying ahead of the competition. The business owner must also be able to manage the business's sustainability and ensure that the business is operating in a socially responsible and environmentally friendly way. The business owner must also be able to manage the business's overall strategy and ensure that the business is achieving its long-term goals. The business owner must also be able to manage the business's overall performance and ensure that the business is meeting its objectives. The business owner must also be able to manage the business's overall risk and ensure that the business is protected from potential risks. The business owner must also be able to manage the business's overall reputation and ensure that the business is seen in a positive light. The business owner must also be able to manage the business's overall customer relationships and ensure that the business is providing a high quality of service to its customers. The business owner must also be able to manage the business's overall innovation and ensure that the business is staying ahead of the competition. The business owner must also be able to manage the business's overall sustainability and ensure that the business is operating in a socially responsible and environmentally friendly way. The business owner must also be able to manage the business's overall strategy and ensure that the business is achieving its long-term goals. The business owner must also be able to manage the business's overall performance and ensure that the business is meeting its objectives. The business owner must also be able to manage the business's overall risk and ensure that the business is protected from potential risks. The business owner must also be able to manage the business's overall reputation and ensure that the business is seen in a positive light. The business owner must also be able to manage the business's overall customer relationships and ensure that the business is providing a high quality of service to its customers. The business owner must also be able to manage the business's overall innovation and ensure that the business is staying ahead of the competition. The business owner must also be able to manage the business's overall sustainability and ensure that the business is operating in a socially responsible and environmentally friendly way.

Questions (25 marks, 30 minutes)

1. Why do you think the success of Facebook is due to its business model? Explain your answer (4)

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C. Extend your understanding

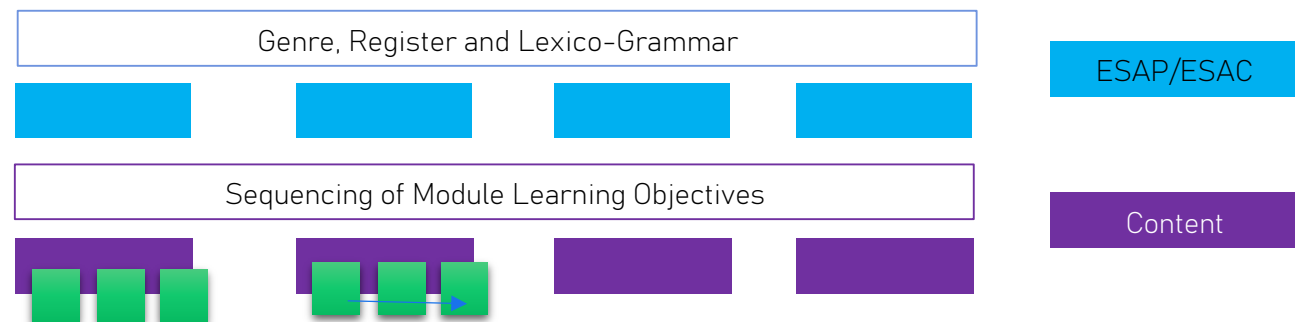
1. You have been appointed Chief Executive of Mark & Spencer. Your mission is to restore M&S to the leading state of choice for women over the age of 30. How do you plan to do this? (20)


2. When faced with crisis in early 2013, a commentator suggested that Microsoft might not survive the coming three years. To what extent do you agree with this statement? (10)

MA TESOL: Core and Elective

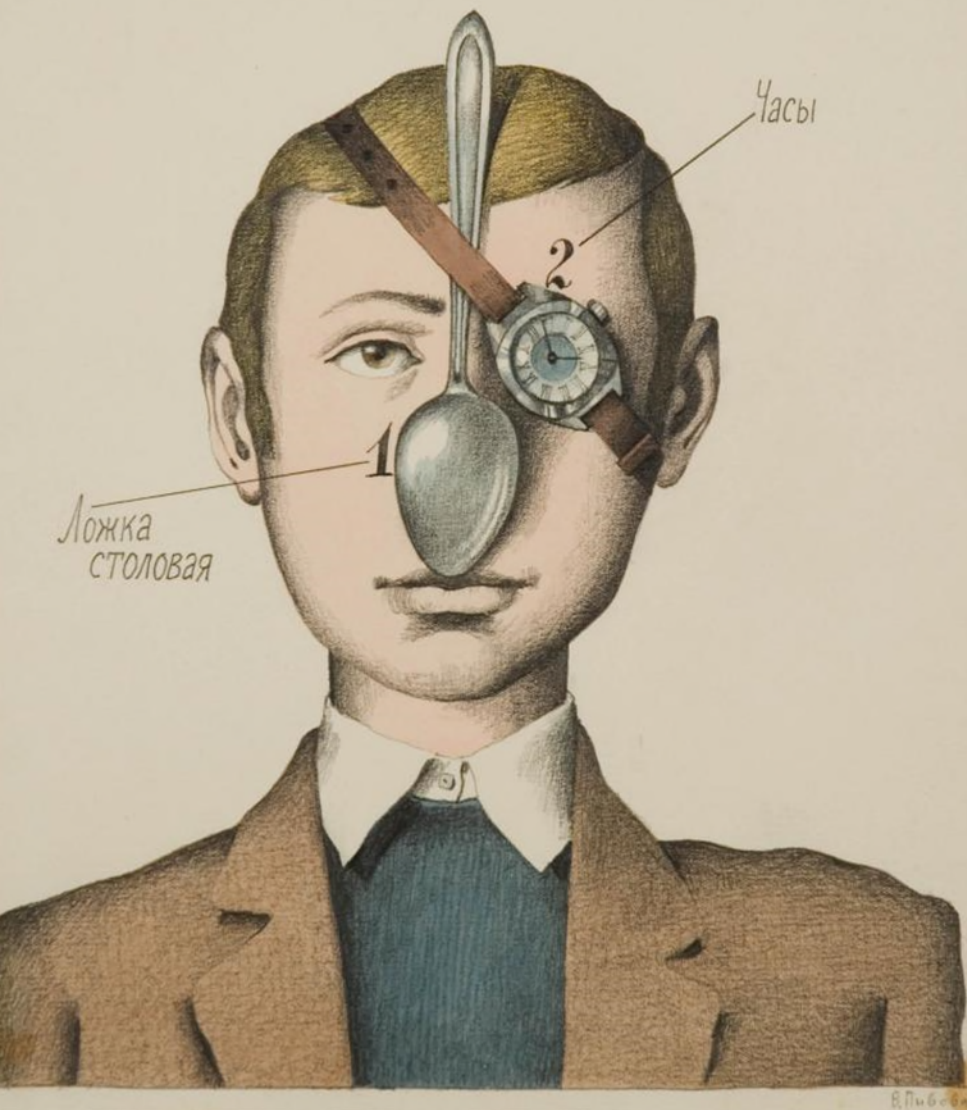


- All students on a modular MA programme
- Embedded literacy materials sequenced by MA programme curriculum
- *Language Learning Objectives* sequenced to ESAP
 - LLOs developed from genre of assessment tasks
- Individual language tasks integrate content & language
- Formative feedback clash of content and genre advice
- Single course written for EAP team (CLIL team?)



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- Establish both content and language learning objectives
 - Determine 'syllabus units' during the needs analysis: i.e. course, module, task etc.
 - Sequence the course by learnability of content learning objectives rather than language objectives
 - Use the distinction of deliverer of materials and writer of materials for collaboration
 - Session-specific learning objectives interweaving both content and language
 - Use the reading-into-writing analysis of assessment briefs
 - Plan a process of cross-familiarization into the materials collaboration (a CPD process) but create materials with (CLIL-teachers' book)
 - Develop materials as an output for the collaboration which can be taught by CLIL teacher
- Establish different time frames for goals. Vision goals: common description of language and embedding of ESAP but also CLIL.
 - Have the confidence to be able to understand the ideas and discuss them intelligently
 - Use content knowledge to deepen your genre and lexicogrammatical knowledge
 - Traditional Grammar Description — Functional Grammar Description — Content & Functional Description

САКРАЛИЗАТОР ДЛЯ ДРУЖЕСКОЙ ВЕЧЕРИНКИ



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