



# Applied Learning in Higher Education: Bridging the Gap Between Theory and Practice

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## Abstract

In the current higher education landscape, many educators continue to rely on traditional teaching methods, such as the memorisation of extensive vocabulary lists and rote learning of texts, which may not fully meet the dynamic needs and diverse learning styles of contemporary students. This research, conducted at the Russian Presidential Academy of National Economy and Public Administration (RANEPA) with students from first to third years, critically examines the limitations of these traditional methods and their impact on practical skill development. Utilising a structured online survey distributed via a Google Forms link, the study gathered data on students' initial educational needs, their preferences for different learning activities, and their engagement levels in rote learning. The questionnaire comprised a series of questions designed to evaluate the effectiveness of traditional teaching methods. The survey featured both multiple-choice and open-ended questions, which provided insights into students' enjoyment of classroom activities, effectiveness of learning vocabulary through lists, and the methods found most helpful in aiding the memorisation process. Results indicate that a heavy emphasis on passive learning can demotivate learners by limiting practical application, engagement, and creative thinking. Based on these findings, the study advocates for a shift towards more dynamic and student-centered teaching methodologies that actively involve students in practical applications, thus enhancing their motivation and fostering improved educational outcomes.

**Keywords:** educational strategies, motivation, practical application, rote learning

## 1. Introduction

In Russia's higher educational system, a longstanding tradition of relying on conventional teaching approaches has shaped the academic landscape. Throughout history, there has been a consistent emphasis on passive skills at the expense of active ones, coupled with a distinct focus on theory that often overshadows practical application. Despite the recognised need for more dynamic teaching methodologies, some educators in Russia remain hesitant to shift away from the established norms. This reluctance to embrace change may be rooted in factors such as the comfort of familiarity, concerns about the perceived effectiveness of traditional methods,

or resistance to departing from a system that has been in place for a considerable period. Within the framework of the traditional teaching approaches in higher education in Russia, one of the most common practices employed by educators is the heavy reliance on rote memorisation. Across numerous generations, educators have often turned to a familiar pedagogical tool: the distribution of extensive lists of vocabulary words for students to memorise or the introduction of texts for memorising information that can be challenging to understand. While this method is straightforward to implement, its efficacy remains variable.

The primary aim of this paper is to challenge conventional methods, specifically the rote memorisation approach utilised by some educators in Russia. The assertion is that these methods do not foster effective learning processes and hinder the development of students' communicative skills, ultimately falling short of meeting students' expectations.

### **1.1 Main Criticisms of a Rote Memorisation Approach**

Krashen (1982) asserts that comprehensible input is a pivotal factor in language acquisition. In contrast, rote memorisation, characterised by the mechanical recall of information without necessarily understanding its meaning or context, may not significantly contribute to language acquisition. Although it aids in the retrieval of isolated words or phrases, it often lacks the depth of understanding and meaningful context provided by comprehensible input.

Furthermore, aligning with Bloom's Taxonomy (Bloom et al., 1956) and the revised version by Krathwohl (2002), which encompass six cognitive levels—remembering, understanding, applying, analysing, evaluating, and creating—it is evident that rote memorisation primarily resides at the foundational level of remembering.

Additionally, it may not equip learners with the ability to apply memorised information in diverse contexts, as application necessitates a deeper understanding of the subject matter. Analysing, a crucial skill in Bloom's Taxonomy, involves breaking down information into parts and understanding relationships. Rote memorisation often fails to promote the analytical skills required for examining and understanding underlying structures or patterns. Moreover, rote memorisation typically does not foster the critical assessment of information or consideration of its validity and relevance, which are essential aspects of the evaluating level in Bloom's Taxonomy. Evaluation requires a more sophisticated level of thinking beyond simple recall. Finally, the highest level in Bloom's Taxonomy involves creating something new based on acquired knowledge. Rote memorisation, centred on recall, may not encourage the creative thinking necessary for original problem-solving or idea generation.

As emphasised by Nation (2001), achieving effective vocabulary learning requires a well-balanced allocation of time across four essential strands: meaning-focused input, meaning-focused output, language-focused learning, and fluency development. Yet, when the emphasis is placed on rote memorisation, there is a risk of neglecting these critical language learning components.

**Meaning-Focused Input:** When words are presented in isolation, often without context, the method of rote memorisation may undermine the importance of exposure to rich and meaningful language input. This includes activities such as reading texts, listening to authentic conversations, and engaging with diverse language materials.

**Meaning-Focused Output:** Rote memorisation, typically centred around recalling information without generating meaningful language output, neglects the development of expressive skills. Speaking and writing, where learners actively communicate and apply their understanding of vocabulary in context, are sidelined in this process.

**Language-Focused Learning:** Rote memorisation may fall short in promoting a deeper understanding of language structures, grammar rules, and the relationships between words. Language-focused learning, which involves explicit attention to language form, meaning, and use, often takes a backseat in favour of repetitive memorisation exercises.

**Fluency Development:** Rote memorisation tends to prioritise accuracy at the expense of fluency. In language acquisition, fluency development is crucial for learners to express themselves effortlessly and naturally. Overemphasising rote memorisation may impede the development of fluent communication skills, as it fails to provide opportunities for learners to engage in authentic and dynamic language use.

A focus on accuracy may create an environment where learners are afraid of making mistakes. According to Krashen's Affective Filter Hypothesis (Krashen, 1982), an elevated affective filter resulting from fear of making mistakes can impede the language learning process. When learners are anxious or apprehensive about potential errors, their affective filter is heightened, making it more difficult for them to absorb and internalise new language input.

As Dörnyei (2014) states, “One of the most demotivating factors for learners is having to learn something that has no apparent relevance to their lives” (p. 526). A memorisation-focused approach might overlook individual needs and interests, hindering engagement. Moreover, the repetitive nature of rote memorisation can lead to disengagement among students. Krashen's Input Hypothesis (Krashen, 1985) underscores the effectiveness of language acquisition through interesting and relevant input. Rote memorisation may fall short in providing such optimal input, resulting in monotonous learning experiences that struggle to maintain student interest.

Schenck (2003) emphasises the importance of imbuing materials with emotional value for effective information retention. This is achieved through elaboration using personal connections, as active engagement with information moves individuals beyond a passive role, making the content more personally meaningful and, consequently, easier to remember. This active involvement can be facilitated through discussions, debates, and other interactive methods. Another vital strategy for amplifying the emotional value of information involves personal problem-solving—encouraging evaluations and subsequent decisions. As Scrivener (2012) notes, “The more a person makes decisions for themselves, the more motivated he or she is likely to feel. The more a person is told what to do, and the less say he or she has in what, how and when, the less likely the person is to feel interested or committed to the task” (p.109). By introducing creative tasks, such as collaborative projects, role-playing scenarios, or language games, educators empower learners to make decisions for themselves. These activities not only engage learners in meaningful language use but also encourage them to apply language forms, meanings, and functions in authentic contexts.

Miller (1956) proposed that short-term memory has a limited capacity, enabling individuals to hold approximately seven (plus or minus two) items or chunks of information. Faced with an extensive list of words or information, the risk of overload becomes evident. When short-term memory is overwhelmed, it can lead to difficulties transferring the information to long-term memory. Rote memorisation is often employed for short-term goals, such as passing exams. The emphasis on immediate recall may neglect the processes required for long-term memory consolidation and storage, leading to a lack of retention beyond the exam period. According to Thornbury (2002), ensuring information moves from short-term to long-term memory involves repetition, retrieval, recycling, and spacing. Repetition through reviewing vocabulary lists and texts multiple times helps reinforce memory, with words being more likely to be retained if encountered at least seven times with spaced intervals. Retrieval, or actively recalling and using language elements in conversation or writing, strengthens long-term memory and enhances practical use. Recycling, the systematic reintroduction of previously

learnt material, helps maintain and reinforce language knowledge, preventing forgetting. Spacing, or distributing study sessions over time, is more effective than cramming, facilitating better long-term retention. Thus, vocabulary practice involving both repetition and retrieval is essential for effective long-term retention and use. Nation (2016) underscores the importance of teaching high-frequency words, as these words appear more frequently in various texts and are, therefore, more valuable for learners. Focusing on high-frequency words benefits learners by prioritising vocabulary they are likely to encounter often in real-life situations.

Schenck observes that visual memory surpasses the memory for spoken words. Therefore, utilising a mind map for presenting information offers a more visually engaging and beneficial approach for memorisation and understanding, as opposed to the conventional method of listing phrases or words. The visual hierarchy and interconnectedness in a mind map provide a more comprehensive representation, fostering improved retention and understanding.

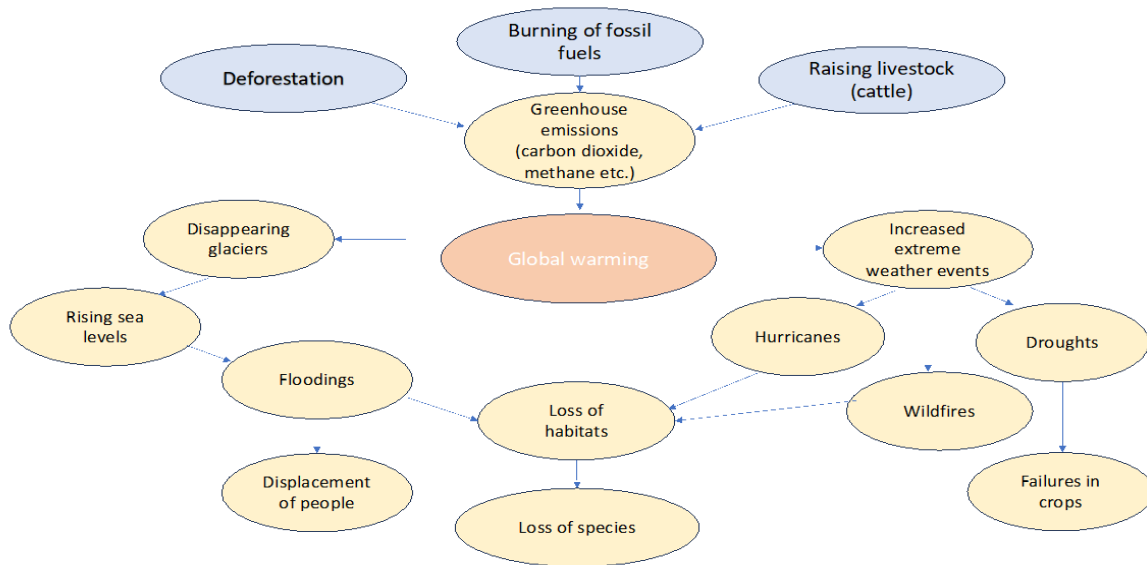
Among the units featured in the booklet designed for first-year students, educators at the Russian Presidential Academy of National Economy and Public Administration (RANEPA) have dedicated a section to the unit on climate change. They have created a list of 130 phrases sourced from the textbook's texts, exercises, and audio materials (Tab. 1). Acknowledging the challenge of memorising such a large number of phrases and their further application, the process can be streamlined for students to memorise the terms more effectively and use them in speech afterwards. By selecting a more focused set of words and presenting them in a cohesive mind map (Figure 1), students can navigate the connections between these terms with greater ease. This approach not only simplifies the memorisation process but also fosters a deeper understanding of how these key concepts interrelate.

*Table 1: Sample phrases from the student list of vocabulary on unit 'Environment'*

to reduce emissions from burning fossil fuels and deforestation
sea level rise
to risk extinction from disappearing habitat and changing ecosystems
Glaciers are shrinking at an increasing/worrying/alarming rate.
to suffer from famine, disease, drought, etc.
to put sb/sth (species) at an increasingly high risk of extinction
to be impossible to reverse (e.g. about environmental changes)
to shrink at the rate of one metre per year
the recent IPCC (Intergovernmental Panel on Climate Change) report concludes that...
to increase in frequency (e.g. about rain)
to be pretty well beyond imagining (The cataclysm is pretty well beyond imagining.)
Earthquakes are generally a precursor of volcanic eruptions.
to question the impact of climate change

Source: Shkurinova, A., Sibileva, L., & Yanaeva, E. (2017). *New Language Leader Practice Guide: Upper-Intermediate Part 1*. Moscow: Russian Presidential Academy of National Economy and Public Administration (RANEPA)

Figure 1: Recommended mind map for vocabulary on unit 'Environment'



Note: Table by the author

## 2. Methodology

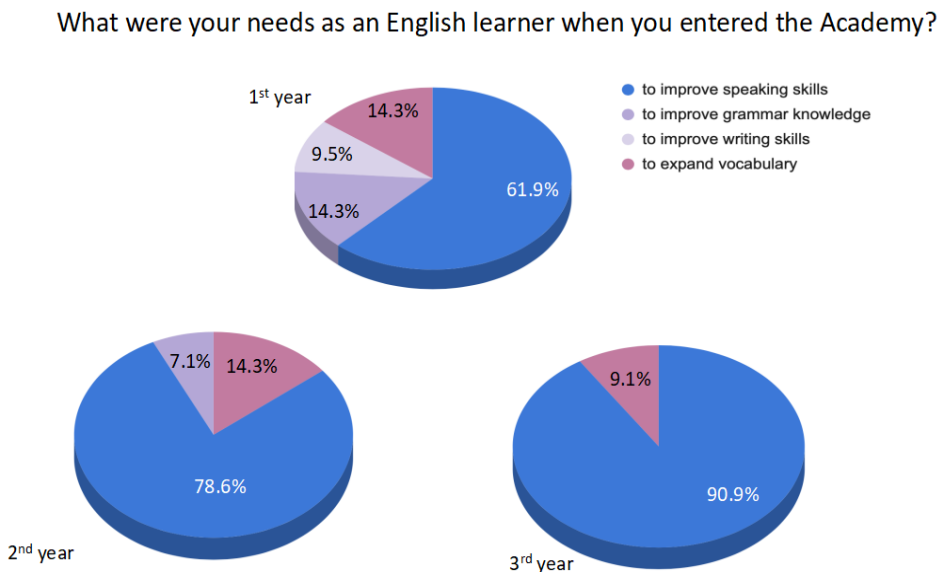
Upon analysing conventional teaching methods, particularly those centred around rote memorisation, a hypothesis emerges. It suggests that the heavy emphasis on memorising theoretical content may not effectively contribute to the development of essential skills required for real-world applications, consequently diminishing students' engagement and motivation. To either support or disprove this hypothesis, a survey was conducted among first, second, and third-year students at RANEPА in Moscow. The survey took the form of a questionnaire provided via a link, allowing participants to complete it anonymously at their convenience.

## 3. Results

42 questionnaires were completed by the respondents, comprising 16 first-year students, 14 second-year students, and 12 third-year students.

According to the survey (Fig. 2), the majority of students (61.9% of first-year students, 78.6% of second-year students, and 90.9% of third-year students) indicated that their primary need as English learners upon entering the Academy was to develop their speaking skills.

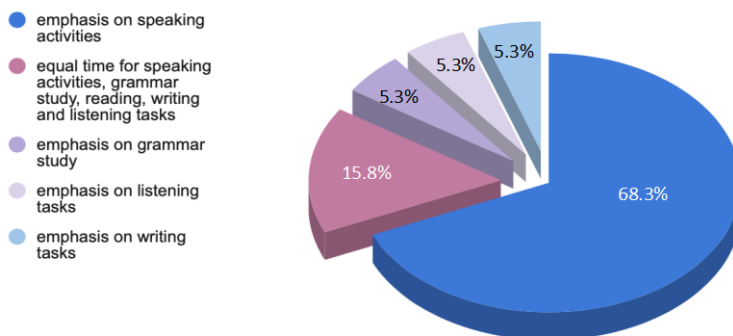
Figure 2: *Students' entry needs at the Academy*



Unsurprisingly, when asked about their preferences for allocating time among language learning activities (Figure 3), the majority of the surveyed participants indicated a preference for speaking activities, with 68.3% choosing this category as their primary focus.

Figure 3: *Preferred time allocation for language learning activities*

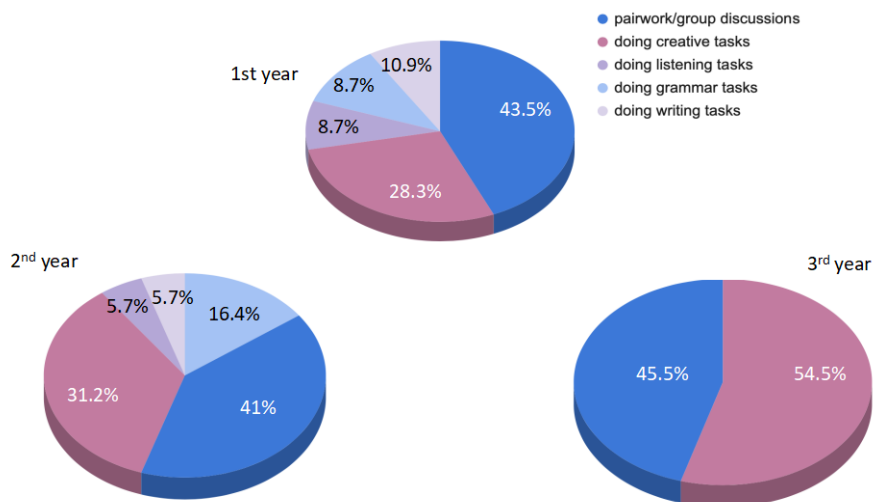
How would you prefer to distribute your time among speaking activities, grammar study, reading, writing, and listening tasks to enhance your language learning experience?



Understandably, when choosing activities they enjoy the most in their English classes (Figure 4), a considerable number of students opted for pair work and group discussions (1st-year students - 43.5%, 2nd-year students - 41%, 3rd-year students - 45.5%). Creative tasks, including group projects, case studies, and presentations, are also favoured by students, chosen by 28.3% of first-year students, 31.2% of second-year students, and 54.5% of third-year students. Interestingly, third-year students underscored the importance of creative tasks over student discussions, expressing a preference for projects, presentations, and solving case studies. They specifically highlighted that, for them, the practical application of the studied material holds particular significance.

Figure 4: Preferred enjoyable activities in English classes

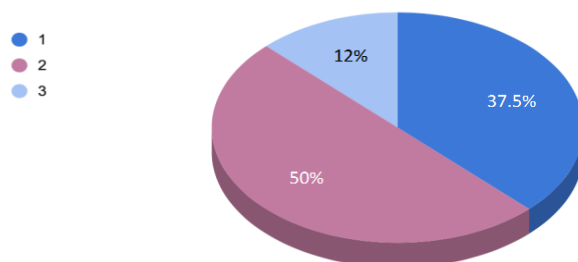
What activities do you enjoy the most in your English classes?



Regarding the question about engagement during rote learning activities (Figure 5), half of the respondents (50%) rated their involvement at a level below moderate, giving it a score of 2 on the scale. A substantial portion of the participants (37.5%) reported the lowest level of engagement, corresponding to a rating of 1 on the scale. A smaller percentage of those surveyed (12.5%) rated their engagement at a level considered moderate. No respondents indicated a level of engagement classified as 4 or 5 on the scale.

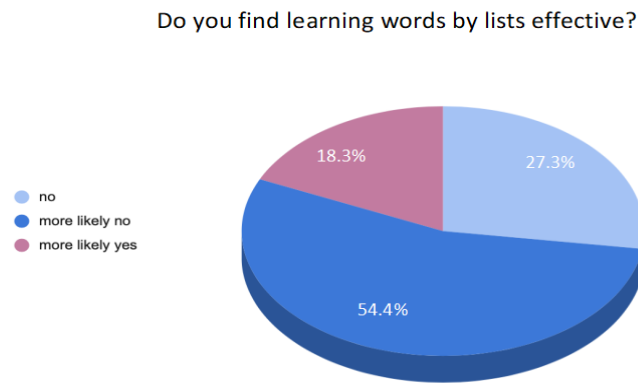
Figure 5: Engagement levels in rote learning activities

On a scale of 1 to 5, how engaged do you feel during rote learning activities?



When queried about the effectiveness of learning words through lists (Figure 6), respondents provided the following breakdown: 54.4% indicated 'more likely no', 27.3% chose 'no', and 18.3% selected 'more likely yes'. In response to the open-ended question prompting students to elaborate on the reasons for their answers, several themes emerged. Students highlighted the challenges associated with memorising a substantial number of words and phrases. They emphasised the necessity to adhere strictly to the provided phrases, without the option to deviate, paraphrase, or use synonyms. Additionally, many students expressed a fear of making mistakes when producing phrases that were not identical to the ones studied. A significant number of students revealed that they predominantly engage in phrase memorisation on the eve of exams, underscoring the lack of practical implications associated with the provided lists.

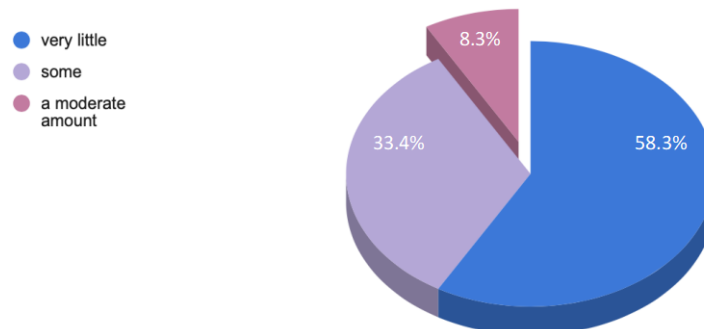
Figure 6: *Effectiveness of learning words by lists*



Concerning the recall of vocabulary from study lists after taking an exam (Figure 7), 58.3% of respondents indicated they were able to recall very little, 33.4% could recall some, and 8.3% managed to recall a moderate amount. This suggests that a considerable portion of the vocabulary is not effectively retained in the long-term memory.

Figure 7: *Vocabulary recall rates after exams*

How much of the vocabulary from your study lists are you able to recall after taking an exam?



When asked about the most helpful methods or strategies in aiding their memorisation process, participants listed the following preferences:

- creating visual mind maps to represent relationships between concepts
- utilising apps, online tools, or software designed for memorisation
- relating information to personal experiences or real-life examples
- using flashcards to quiz themselves on key information

Concerning the factors that demotivate them the most in a classroom setting, respondents cited the following:

- pressure to memorise a large amount of information for exams
- monotonous and unengaging classes
- lack of interactive and collaborative activities
- absence of personalisation



## **4. Conclusion**

Krashen's emphasis on comprehensible input challenges the effectiveness of rote learning in language acquisition, aligning with the findings that rote learning does not support the development of speaking skills or the flexibility required for spontaneous interactions. This limitation suggests a need for educational strategies that enhance active and meaningful engagement with language.

Consistent with Krashen's Affective Filter Hypothesis, the study finds that rote learning can increase anxiety and inhibit free expression due to the fear of making mistakes. This environment can diminish learners' confidence, especially when they are unprepared to apply knowledge beyond memorised content.

Echoing Nation's principles on effective vocabulary learning, the results demonstrate that randomly listed phrases out of context lead to superficial comprehension. This aligns with the importance of integrating meaning-focused input and output, which are critical for deep learning and long-term retention.

As highlighted by Miller regarding the limited capacity of short-term memory, the findings raise concerns about the depth and durability of learning via rote memorisation. According to the research, students tend to learn vocabulary lists on the eve of exams, a practice that likely contributes to short-term recall rather than long-term retention. Thornbury's principles underscore the importance of repetition, retrieval, recycling, and spacing in moving information from short-term to long-term memory. This suggests a misalignment with educational objectives that favour sustained knowledge retention, emphasising the need for strategies that promote deeper and more durable learning.

The conclusions about the lack of transferability in rote memorisation resonate with Bloom's Taxonomy, which emphasises the need for higher-order thinking skills such as applying, analysing, and evaluating—skills that rote memorisation fails to develop.

Supporting Dörnyei's research on motivation, the study confirms that repetitive rote learning leads to learner disengagement. Incorporating creative collaborative activities that resonate with learners' preferences and increase engagement through meaningful and contextual learning experiences is advocated.

In line with Schenck's emphasis on the emotional value of learning materials, the findings support the use of mind maps and digital applications that facilitate a more interactive and engaging approach to memorisation. These methods promote enhanced retention and application of language concepts, offering a preferable alternative to traditional rote techniques.

## **5. Recommendations**

1. Recognising the limitations of rote learning in meeting students' needs for improved speaking skills, a recommended approach is to decrease dependence on rote memorisation. This adjustment aims to cultivate students' speaking abilities, empowering them to think on their feet and navigate spontaneous interactions effectively.
2. Allowing students to deviate from the suggested phrases for memorisation will alleviate their stress levels, contributing to a more relaxed and conducive learning environment. This approach not only fosters creativity and individual expression but also nurtures a

sense of confidence and comfort in their ability to articulate thoughts beyond memorised content.

3. Developing curriculum and teaching materials that embrace contextual learning, ensuring phrases and information are presented to establish meaningful connections, is critical. Creating mind maps is highly recommended to enhance understanding and retention. Students can be encouraged to construct concept maps independently, visually representing relationships between different concepts. This aids memorisation and fosters critical thinking as students organise and connect information, promoting a more comprehensive understanding of the material.
4. Prioritising long-term learning strategies over short-term exam memorisation is essential. To optimise memorisation and ensure proper retention, it is advisable to reduce the number of phrases, allowing for a more focused and effective learning experience.
5. It is crucial to incorporate real-world connections into the educational framework. The inclusion of problem-solving activities and case studies not only reinforces the memorisation of information but also equips students with the skills to apply their acquired knowledge in addressing complex challenges they may encounter in real-world situations. Introducing diverse and engaging learning experiences, such as group discussions, debates, problem-solving tasks, case studies, presentations, can break the monotony of rote learning and foster student motivation and active participation.
6. Relating memorisation tasks to topics that align with students' personal interests or career goals is strongly encouraged. When students see the relevance of the information to their lives, engagement tends to increase.
7. Leveraging technology proves beneficial, as educational apps, online quizzes, and interactive simulations contribute to an enriched learning experience.

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