

Key Decisions for an English Grammar Practice Platform

This report addresses four key questions in designing an English grammar learning system: (1) whether to provide **real-time sentence checking** or post-submission feedback, (2) how to handle data and whether to integrate third-party grammar APIs, (3) how to implement **tense-focused grammar practice** (adaptive vs. manual), and (4) what **evaluation styles** to use for testing grammar and tenses. Each section below explores these considerations with supporting insights.

Real-Time Sentence Checking (Immediate Feedback)

Provide Immediate, Real-Time Feedback: It is highly beneficial to give users instant feedback on their sentences rather than waiting until after submission. Real-time corrective feedback allows learners to notice and correct errors while the context is fresh in their mind. In second-language acquisition research, immediate feedback helps prevent learners from reinforcing mistakes as habits ¹. For example, as soon as a user writes a sentence, the system can highlight grammar errors in red or underline tense misuse, enabling the user to reflect and revise immediately. This approach aligns with behaviorist learning theory (which advocates immediate correction to form correct habits) and skill acquisition theory (which suggests prompt feedback aids in proceduralizing grammar knowledge) ¹. Furthermore, cognitive studies indicate there is a “cognitive window of opportunity” (on the order of ~40 seconds) during which a learner can best compare their erroneous sentence with the correct form ². By delivering instant feedback within this window, the platform helps the learner internalize the correction more effectively. In practice, this could be implemented via an AI grammar checker that continuously evaluates the user’s writing and provides color-coded hints or suggestions in real-time. Overall, **实时反馈 (real-time feedback)** is recommended, as it supports continuous learning and quicker correction of mistakes, rather than delaying feedback until after the entire sentence or exercise is submitted.

Data Handling and APIs (Third-Party Integration)

Prefer Free/Open-Source Grammar Engines for Integration: To check grammar and provide feedback, we should choose tools or APIs that align with budget and privacy constraints. The question asks if we are open to third-party services like OpenAI’s GPT API or Grammarly’s SDK, and the note “最好是免费的” indicates a preference for free solutions. Integrating a large language model (LLM) like OpenAI’s GPT-4 via API could offer advanced feedback and suggestions, but it is not free and would incur ongoing usage costs. Additionally, using such external APIs means sending user-written sentences to third-party servers, raising privacy concerns. Grammarly’s SDK, similarly, is a proprietary solution that might come with costs or data-sharing issues. As an alternative, **open-source grammar checking libraries** or services are very attractive. For instance, LanguageTool is an open-source grammar and style checker that supports multiple languages and can be self-hosted. Its core engine is free and open-source, which means we can run it on our own server without per-use fees ³. LanguageTool also offers an HTTP API and outputs JSON, making it straightforward to integrate into our platform ⁴. Importantly, LanguageTool emphasizes privacy—it processes text without storing it and adheres to strict data protection (it’s developed in Europe with GDPR compliance) ⁵. In contrast, Grammarly’s cloud service stores user text on US servers ⁵, which might be undesirable for our use case. By using a free solution like LanguageTool, we avoid subscription costs and keep user data in-house. If more advanced feedback (like

nuanced style suggestions or AI-generated explanations) is needed, we could consider using an open-source AI model or a paid API as an **optional** feature, but the default should be a cost-free system. In summary, we favor **free, open-source grammar APIs** for integration – they are budget-friendly and can be deployed without exposing user data externally. This approach aligns with the “免费” preference and ensures we maintain control over data handling.

Tense-Focused Grammar Practice (Adaptive Learning)

Adaptive, Auto-Generated Practice Based on User Level: For focused grammar practice, especially with English tenses, the system should dynamically adjust to each learner’s needs. Rather than manually assigning the same set of tense exercises to everyone, an **adaptive approach** can target the tenses a user struggles with most. This means if the user repeatedly makes mistakes with, say, the present perfect tense, the platform will automatically provide more practice questions involving present perfect. Research in grammar tutoring supports this personalized strategy: an effective system “delivers highly personalized, differentiated instruction” and “provides lessons and adaptive practice to build each student’s skills” in areas like verb tense usage ⁶. In practical terms, the platform might start with a broad placement or initial quiz to see which tenses the user already knows, then tailor subsequent exercises. As the user completes exercises, their performance data (which tenses they got wrong or right) feeds into an **AI or rule-based engine** that selects appropriate follow-up tasks. Modern learning apps already use this technique: for example, GrammarTrack’s system analyzes a learner’s “progress and pain points” using AI and then “tailors every task” to ensure genuine progress ⁷. We should implement a similar mechanism to 自动匹配 (automatically match) practice to the user’s level.

Tracking What Tenses the User Has Learned: A crucial component of this adaptivity is maintaining a profile of the user’s learned material. The system needs a way to determine **which tenses the user has been taught or has mastered** so far. This could be done through a structured curriculum of lessons (e.g. the user completes a Past Tense lesson, so the system marks past tense as “learned”) combined with performance tracking (e.g. the user consistently answers past tense questions correctly, indicating mastery). By using regular assessments or quizzes, the platform can identify the user’s strengths and weaknesses and create a personalized learning roadmap ⁸. For instance, after each module the user might take a short test on all tenses covered; if the results show the user is weak in a particular tense, the system knows to offer remedial practice for that tense in future sessions. This ensures the algorithm doesn’t give practice for a tense the user has **never** seen before (which would be confusing), and focuses on tenses that are in the user’s current learning stage or just beyond it (within their zone of proximal development). In summary, grammar practice should be **auto-generated and adaptive** — the software dynamically focuses on tenses that need improvement — but this requires a robust mechanism to track what tenses each user has learned and to measure their proficiency in each. With progress tracking and AI analysis of user errors, the platform can intelligently serve up the right mix of tense exercises at the right time ⁷ ⁸, optimizing the learning process for each individual.

Evaluation Methods for Grammar and Tenses

Use a Variety of Exercise Types for Testing: To effectively evaluate grammar and tense knowledge, it’s best to employ **multiple question formats** – including sentence correction, multiple-choice, drag-and-drop, fill-in-the-blank, and others. Each format has its advantages, and using a mix can provide a more comprehensive assessment while keeping learners engaged. As the British Council notes, there are many question types, each with different strengths and weaknesses; using the right type for the right skill gives

a clearer picture of student ability ⁹ . Below, we discuss the suggested formats and why using all of them (“所有这些” , i.e. all of the above) is beneficial:

- **Error Correction (Sentence Correction):** These exercises present a sentence (or a short passage) containing mistakes and ask the learner to identify and correct them. This format is very direct for testing grammar in context – the student must actively apply grammar rules to fix errors. Error correction tasks are “useful for testing grammar and vocabulary” in a practical way ¹⁰ . For example, “I goes to school yesterday.” – the user would need to correct it to “I went to school yesterday.” This method tests productive skills and understanding of why something is wrong, not just recognition. It mirrors real-world writing correction and can reinforce learning by having students make corrections themselves.
- **Multiple-Choice Questions:** Multiple-choice (MCQ) is a classic evaluation method where the learner selects the correct option from several choices. MCQs are easy to grade automatically and can cover a broad range of content quickly ¹¹ . For instance, a question might ask: “She ____ to the store yesterday.” with options (A) go, (B) gone, (C) went, (D) going. The learner must pick the grammatically correct tense. The advantage of multiple-choice is efficiency and coverage: we can test many tense items in a short time. However, MCQs also have some drawbacks: learners might guess answers, and poorly written options can sometimes test reading comprehension more than grammar knowledge ¹² . We must craft distractors (wrong options) carefully to minimize guessing and ensure the question truly targets the grammar point. Despite these caveats, multiple-choice can effectively assess recognition of correct tense forms and is suitable for quick quizzes or high-level tests.
- **Drag-and-Drop (Sentence Construction or Matching):** Drag-and-drop exercises are interactive tasks where learners arrange words or fragments to form a correct sentence, or match components by dragging them on screen. This format is more engaging and hands-on, which can be motivating for learners. For grammar and tenses, a drag-and-drop could involve unscrambling a jumbled sentence into the correct order or matching a tense name to an example sentence. According to educators, “drag-and-drop activities provide a quick and fun way of practicing ... grammar” in a more dynamic fashion ¹³ . For example, the app might show pieces like “**have** / **I** / **finished** / **my homework** / **?**” and the learner must drag them into the correct order “Have I finished my homework?”. This tests word order and sentence structure understanding. Drag-and-drop can also be used for categorization (e.g. drag verbs into past or present tense groups). The interactive nature of this format can cater to different learning styles and break the monotony of only one type of question.
- **Fill-in-the-Blank (Cloze) & Other Types:** Another useful format is fill-in-the-blank, where learners must type the correct tense form into a blank within a sentence. This is similar to MCQ but without providing options, thereby reducing guessing and requiring recall of the correct form. Cloze exercises (where every nth word is removed from a passage) can integrate reading comprehension with grammar knowledge ¹⁴ . Additionally, matching exercises (e.g., matching a tense name to its timeline usage, or matching two sentence halves) and true/false questions (judging if a sentence is grammatically correct) can be included to diversify the evaluation. Each type targets a slightly different cognitive skill – for instance, transformation exercises ask students to rewrite a sentence in a different tense, which tests deeper understanding of tense rules ¹⁵ .

Combining All Methods for Comprehensive Assessment: There is no single “best” format; in fact, using all of these in rotation or in combination will yield the best results. Mixing question types helps cover both **recognition** (passive knowledge) and **production** (active use) of grammar. It also keeps the

practice interesting – a learner might get bored if every question is, say, multiple-choice. By incorporating variety, we cater to different preferences and prevent the testing from becoming too predictable. Pedagogically, a blend of formats ensures that we are not only testing rote memorization (which multiple-choice might tend toward) but also practical application (through writing or arranging sentences). The key is to use each format appropriately: e.g., use error correction to deeply assess grammar in context, use MCQs for quick checks across many points, use drag-and-drop for interactive learning, etc. ⁹ . This multifaceted evaluation strategy provides a more **reliable measure** of the learner's grasp of grammar and tenses. It also helps students prepare for real-world language use, since they will need to both recognize correct grammar and produce it themselves. In conclusion, the grammar/tenses should be tested through a **combination of sentence correction, multiple-choice, drag-and-drop construction, and other interactive exercises**, capitalizing on the strengths of each format and mitigating their individual limitations ¹⁰ ¹¹ .

Sources:

- Allen et al. (2023). Optimal timing of treatment for errors in second language learning – A systematic review of corrective feedback timing. *Frontiers in Psychology*, 14:1123008. (Supports immediate feedback) ¹ ²
- Julia Merkus (2025). Four Reasons to Pick LanguageTool over Grammarly. *LanguageTool Blog*. (Discusses free open-source grammar checking and data privacy) ⁵ ³
- GrammarTrack – Features (2025). *GrammarTrack.com*. (Describes AI-driven personalized grammar practice and progress tracking) ⁷ ⁸
- British Council TeachingEnglish (2025). Test question types. (Explains various question formats for testing language skills and their pros/cons) ¹¹ ¹⁰
- GrammarBank.com. Drag and Drop Grammar Exercises. (Highlights engagement benefit of drag-and-drop practice) ¹³

¹ ² Optimal timing of treatment for errors in second language learning – A systematic review of corrective feedback timing - PMC

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9995700/>

³ ⁴ ⁵ Four Reasons to Pick LanguageTool over Grammarly

<https://languagetool.org/insights/post/grammarly/>

⁶ US20150106705A1 - Adaptive Grammar Instruction - Verb Tense - Google Patents

<https://patents.google.com/patent/US20150106705A1/en>

⁷ ⁸ GrammarTrack - Learn, Practice, Master English Grammar

<https://grammartrack.com/features/>

⁹ ¹⁰ ¹¹ ¹² ¹⁴ ¹⁵ Test question types | TeachingEnglish | British Council

<https://www.teachingenglish.org.uk/professional-development/teachers/assessing-learning/articles/test-question-types>

¹³ Drag and Drop Grammar Exercises

<https://www.grammarbank.com/drag-drop-english.html>