



# Online Diagnostic Testing for Secondary School Students - an International Trial

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## Presentation Outline

- Background / literature – an opportunity to be further explored
- Test design and production
- Trial and research outcomes
- Future plans



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## Diagnostic Language Assessment

- Underdeveloped
- Should answer three questions:
  - Where is the learner going? (their goals)
  - Where is the learner now? (in relation to those goals)
  - Where should the learner go next? (to achieve those goals)
- Should provide detailed feedback

(Alderson, 2005, Jang & Wagner, 2013; Kunnan & Jang, 2009, Lee & Sawaki, 2009; Lee, 2015)



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## Test Design

- Online test of grammar at A2 based on Cambridge English Curriculum
- For learners of secondary age, giving instant feedback on completion
- For teachers, giving feedback at a class level to better target teaching
- Resources for teachers



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## Test Production

- Initial issues – length of test, grammar categories to test
- Selecting and writing material, constructing test
- Learnosity and results technology
- Feedback and resources



# Student Feedback

GRAMMAR TEST English

[1] Adjectives and Adverbs ✓ Clauses & Word Order ✓ Determiners ✓ Modals ✓ Prepositions ✓ Pronouns ✓ Verbs

## Adjectives and Adverbs Focus for improvement

[2]

- An adjective describes a noun or pronoun. **Big, happy and interesting** are all adjectives. There are also comparatives (such as **bigger**) and superlatives (such as **biggest**).
- An adverb describes, or gives more information about, a verb, adjective, adverb or phrase. Many adverbs end in **-ly**, for example **quickly** or **luckily**. But others don't end in **-ly**, for example **well** or **sometimes**.

For example

[3]

- I ate breakfast **quickly**.
- I **often** go to **Italian** restaurants. (**often** = adverb; **Italian** = adjective)
- It is **really** **beautiful** here. (**really** = adverb; **beautiful** = adjective)

How did I do? [4]

- Practise describing things, people, places, events and so on, so that you have the opportunity to use adjectives and adverbs. Be careful with words that are often confused, such as **hard** and **hardly**, and **late** and **lately**.

Your answers [5]

They are ready to jump high to hit it over the net as ~~hard~~ hard as possible.

I can get there more quickly by train than by car.

She came to live here quite ~~quite~~ almost a month ago.

Two years later, she started her own business.

Have you ~~still~~ already seen that new film which your favourite actor is in?

The coffee is more expensive ~~like some biscuits~~ than the tea.

It doesn't take long to get to London from here - ~~an hour~~ only two hours.



# Teacher Feedback

COHORT SUMMARY

Home / Cohorts / TestingCohort (UW5)

Log out demo

## TestingCohort (UW5)

ID# **UW5** | 32 learners | date created **2018-2-8** | [Direct link](#)

**Summary** | Adjectives and Adverbs | Clauses & Word Order | Determiners | Modals | Prepositions | Pronouns | Verbs

Show learners by: **Category** | Ability



General Guidance for Teachers | **Focus for Improvement** | Mixed Level Learners | Learning can be Extended

### [2] For learners who need more practice

Focus for Improvement

It's good to give learners a mix of seeing the grammar in use at phrase level and sentence level, and then looking at the language in a wider, more communicative context. Showing learners both types of language in context – at a smaller level and then at a wider level is good as it gives them different kinds of opportunities to learn.

Practising the grammar at phrase level and sentence level gives learners a chance to continue developing their ability to understand how the grammar works.

Giving learners chances to say, listen to, read or write language in a communicative way can help them to see and use the grammar in context. The context can also help them to make connections with what they already know and what they still need to learn.

Learners at this level (around A2 on the CEFR) typically need support sometimes



# Teacher Feedback

Summary **Adjectives and Adverbs** Clauses & Word Order Determiners Modals Prepositions Pronouns Verbs

**Adjectives and Adverbs**  
Adjectives describe nouns; adverbs describe verbs and adjectives

**24 learners** **8 learners**

Examples ▾ **[4]**

I ate breakfast quickly.

I often go to Italian restaurants. (often = adverb; Italian = adjective)

It is really beautiful here. (really = adverb; beautiful = adjective)

**Focus for Improvement** 24 learners tested in this category

Learners ▾ **[5]**

UOYX-6498-WB | YSWK-4398-XF | DYNR-4027-HF | GQHT-6508-QO | PKHW-7825-RG | DLFZ-1870-UX | SPMW-6819-LT | RXFC-0382-DU | FGAY-1807-RD | DKWY-5614-RT | XCAQ-8152-IW | LNYR-0713-LJ | ZWIK-6758-HU | MZEO-6435-YC | BIPK-9805-OM | ORYL-8317-RQ | IJYX-9365-OZ | TZAM-8032-UK | FRPO-3846-DL | FUGS-2475-NC | GCXO-0932-VS | KSMG-5912-HX | YDVK-5120-QF | HXIZ-2086-ZN

Learners ▾ **[5]**

STNZ-5619-UL | UIJC-6471-KO | BPOC-1379-AO | WANL-9357-RB | EJFS-7802-PH | NRJX-7456-VE | EFNA-5783-BN | PWD7-7306-QS

What should I teach? **[6]**

- intensifying adverbs with gradable adjectives (**very, really, so, quite, too**)
- comparatives
- superlatives
- adverbs of time (**yesterday, just, now, already, first, then, after that**)
- some adverbs to indicate attitude or viewpoint (**actually, unfortunately, of course**)

What should I teach? **[7]**

- understanding order of adjectives when describing nouns with more than one adjective
- using a limited range of compound adjectives (e.g. **good-looking, well-known**)
- adverbs to indicate degree of certainty (e.g. **probably, certainly, definitely**)
- range of adverbs to indicate attitude or viewpoint (e.g. **basically, obviously, honestly**)
- adverbs as discourse markers within text (e.g. **firstly, therefore, furthermore**)

**Guidance for Teaching Adjectives and Adverbs** **[8]**

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**Ideas for Teachers**

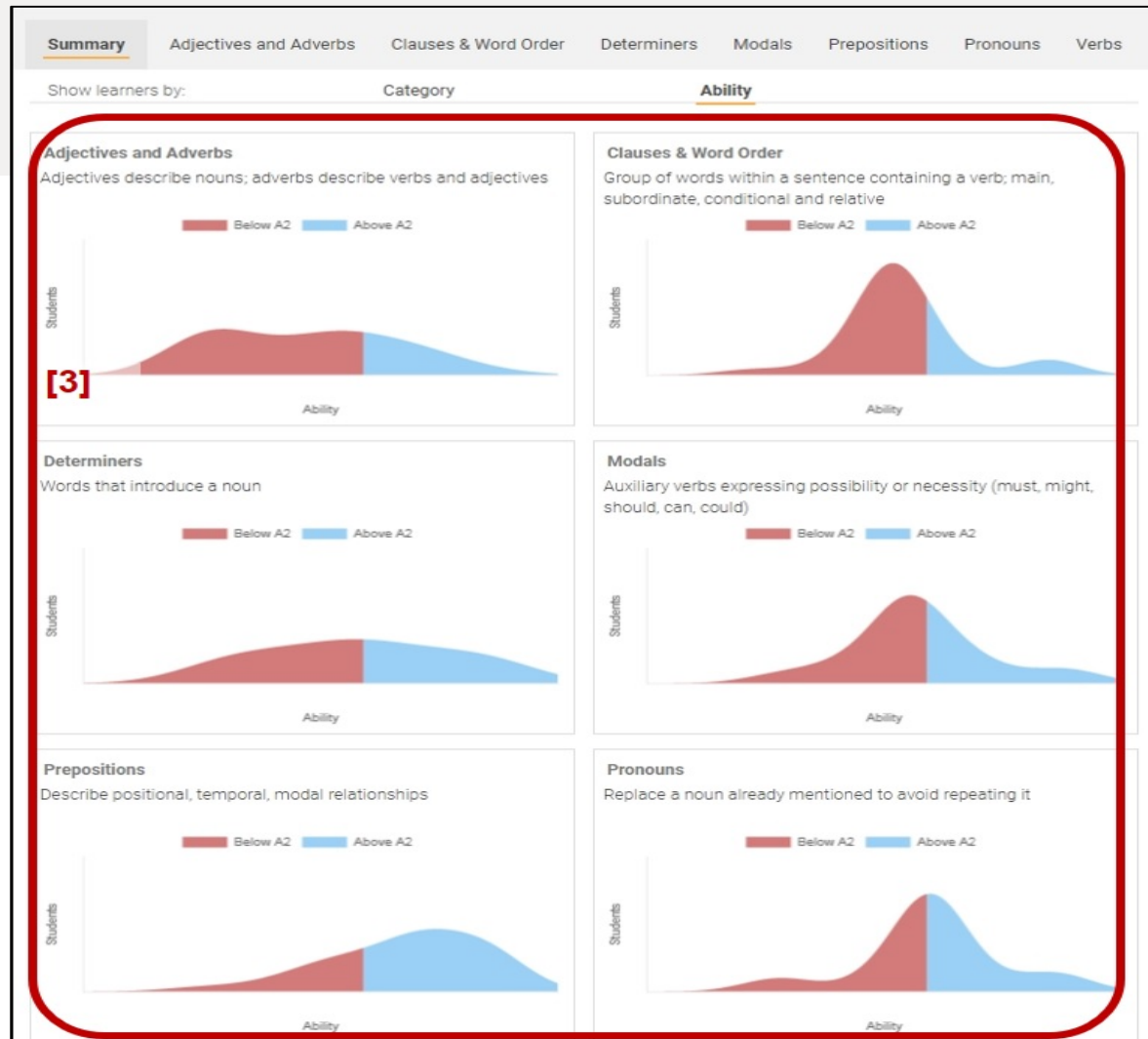
Phrase and sentence-level ideas  
**One Stop English** has suggestions for practising adjectives <http://www.onestopenglish.com/grammar/grammar-reference/adjectives/adjectives-and-noun-modifiers-in-english-tips-and-activities/144845.article>

**One Stop English** also has contains tips for practising comparatives and superlatives <http://www.onestopenglish.com/grammar/grammar-reference/adjectives/comparative-and-superlative-adjectives-tips-and-activities/144844.article>





# Teacher feedback





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## Research Questions (2018 trial)

RQ1: What were students' and teachers' overall perspectives on using the diagnostic test?

RQ 2: What were the main challenges of using the test?

RQ3: How could these identified areas be improved for subsequent test iterations?



## Data Collection Methods

After taking the test...

Method	Participants	Locations	Notes
Post-test surveys	986 students (15)  32 teachers	Mexico / Spain / Peru / Estonia	Translated into local languages
Focus groups	6-15 per group	Mexico / Spain / Peru / Estonia (face to face)	Conducted with a moderator  Translator used when necessary



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## Focus Groups - Thematic Analysis (NVivo)

- Ease of test use
- Usefulness of feedback
- Practicalities of using the test
- Suggestions for future improvements



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## Ease of Test Use

"I was highly motivated myself to take part.....and also with my students and for my students is to practice these computer-based exams, just to see – as you mentioned, it was A2 level – just to see how they fit in or do not fit in. - Meelis, Estonia (teacher)

- Connection between prior learning and demonstrable progress
- Busy schedules
- Timing (50 minutes estimated – backup plan required)



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## Usefulness of Feedback

Overall useful, but:

- Presentation and format required improvement - more graphs
- Feedback accuracy - most teachers commented that it provided a fair reflection of their learners' abilities.
- However, it was not always detailed enough - too general



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## Practicalities of Using the Test

- Some technical problems reported (crashing for example), physical space
- Teachers wanted the test beforehand
- Many students appeared to be taking a CBT for the first time
- Used to using computers for playing games / socialising – unfamiliar combination
- Teachers - more mistakes on the computer?



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## Suggestions for Future Improvements

'I like how we were able to receive feedback as general and also individual students: big picture and smaller detail regarding the level. The syllabus needs to be realistic based on learners' abilities. Finally it should have had other abilities such as speaking and listening'.

- Barbera, Mexico (teacher)

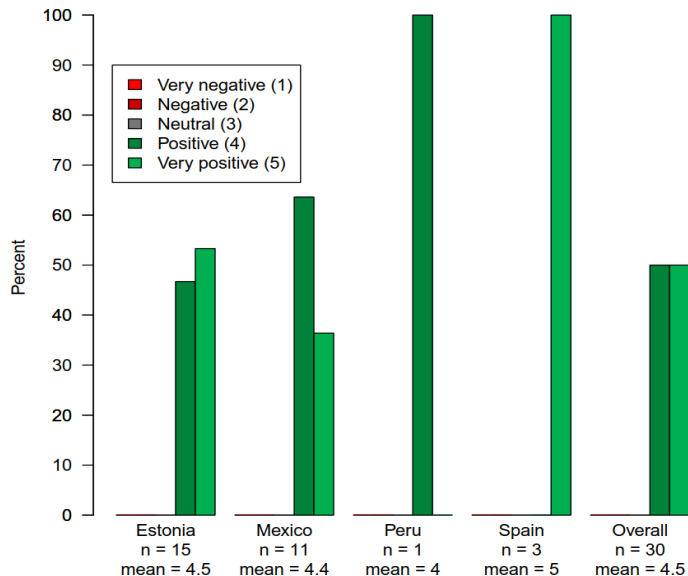




## Post-test Surveys - Quantitative Data Analysis

- Survey responses largely supported the focus group data
- Most respondents also viewed the test as positive overall (but there were some issues and suggested improvements)

**Figure 1: Teachers' answers to the question, "Overall, how positive or negative do you feel about the diagnostic test?"**





**Table 1. Student views on the test when asked whether they agreed or disagreed with the statements shown in the first column.**

Strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5.

Statement	n	Mean *	Disagree or strongly disagree	Neutral	Agree or strongly agree
The feedback was easy to understand.	965	3.8	13.9%	21.5%	64.7%
The feedback is helpful for my English studies.	968	4.1	5.8%	13.8%	80.4%
I had technical problems with the computer or the internet.	968	2	74.3%	8.8%	16.9%



**Table 2: Teacher views on the feedback provided.**

Statement	n	Mean	Disagree of strongly disagree	Neutral	Agree of strongly agree
I understood better my students' learning needs from the feedback.	32	4.0	3.1 %	25.0%	71.9%
The feedback was easy to understand.	31	3.9	3.2 %	29.0%	67.7%



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## Key Findings

### **RQ 1: What were students' and teachers' overall perspectives on using the diagnostic test?**

The test performed well overall, several potential improvements which emerged for the next iteration:

- Presentation of feedback
- Specificity of feedback
- Limited to grammar / A2



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## Key Findings

### RQ2: What were the main challenges of using the test?

Computer-related issues (practical)

CBT and implications for test validity

Classroom space

Timing



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## Key Findings

### **RQ 3: How could these identified areas be improved for subsequent test iterations?**

Adjust time and combine skills

Further explore CBT / validity

More levels (B2)

Practical issues / space (advice?) – Cambridge vs the real world



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## Conclusion

An informative first trial overall

- Several points of improvement for the next phase
- Steps taken in response to the findings (levels, platform, skills)
- Update and future plans

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