EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN

LEAD
Graduate School & Research Network

Leibniz-Institut für
Wissensmedien

Bildungsziele und Lernprozesse zusammendenken

KI zur Lernunterstützung statt KI-Doping

Detmar Meurers

AG “Sprache und KI in der Bildung”
Leibniz-Instituts für Wissensmedien (IWM)

Tübingen Center for Digital Education (TüCeDE)
Eberhard Karls Universität Tübingen

Tagung “Künstliche Intelligenz im Lehramtsstudium”

PH Ludwigsburg – 31. September 2026

Digitalisierung und Künstliche Intelligenz in der Bildung?

- Digitalisierung der Bildung wird seit vielen Jahren diskutiert:

  Computer in alle Schulen, alle Schüler an die Computer – dieses Programm wollen die Kultusminister zügig verwirklichen. [Spiegel Nr. 47 / 18.11.1984]



- Inzwischen ist ein regelrechter Hype um Künstliche Intelligenz dazugestoßen – allerdings oft als abstrakte Vision einer sich ändernden Welt, gerne illustriert mit Robotern.

KI IN DER BILDUNG

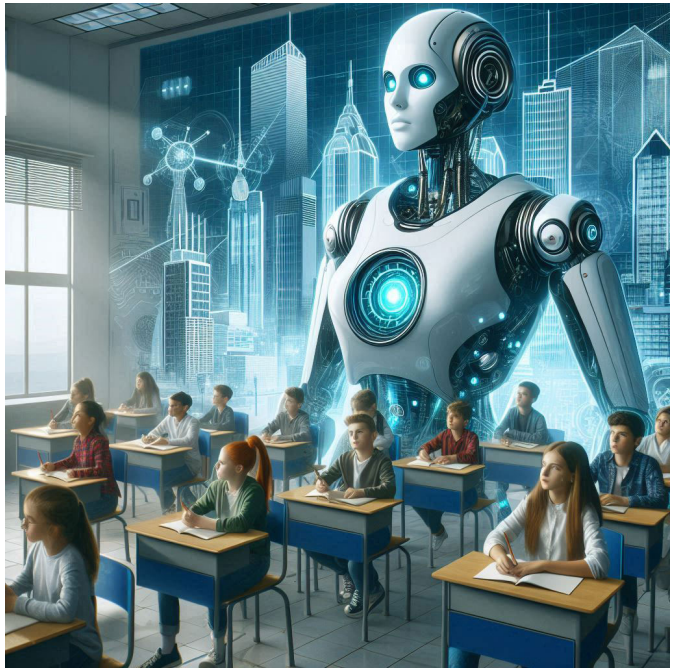
DER DIGITALE LEHRER

Von Katharina Lehmann · 2021

Statt Frontalunterricht mit den gleichen Lerninhalten für über zwanzig Schüler zu geben, gehen KI-Systeme individuell auf die Lernbedürfnisse jedes einzelnen Schülers ein. Für Lehrer bedeutet das Entlastung – sie können sich vor allem um die Schüler kümmern, die ihre Hilfe am dringendsten brauchen.







Voraussetzungen für einen effektiven KI Einsatz in der Bildung

- Digitalisierung und KI sind kein Selbstwert an sich – es ist essenziell zu überlegen
  - (i) was konkret ermöglicht werden soll,
  - (ii) basierend auf welchen wissenschaftlichen Erkenntnissen zum Lernen und Lehren der Fachdidaktiken, Psychologie, Erziehungswissenschaften, . . .
  - (iii) um welche realen Herausforderungen des Bildungskontexts zu lösen.
- Was können KI-Methoden dabei leisten?
  - **Interaktivität**: Lernende während des Lernens unterstützen.
  - **Adaptivität**: Individuelle Unterschiede der Lernenden berücksichtigen.

Bsp 1: Herausforderung Heterogenität im fachlichen Lernen
- Mehrdimensionale Vielfalt ernst nehmen – ein effektiver Lösungsansatz am Beispiel des Fachs WBS

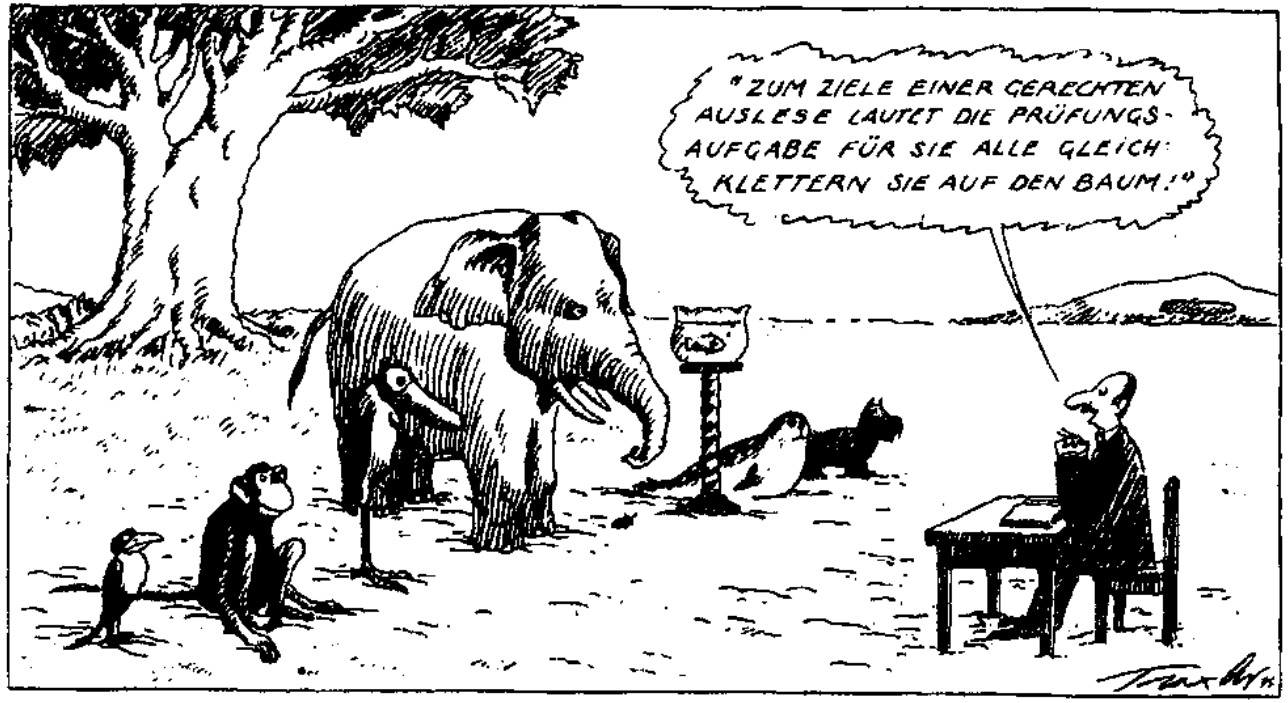
Bsp 2: Fremdsprachenerwerb
- Von erforschten Mechanismen zu Lösungen in der Bildungspraxis

Heterogenität ist eine zentrale Herausforderung für LehrerInnen

- Individuelle Förderung wird als wichtigstes anzustrebendes Ziel von praktisch allen Lehrern genannt, aber 90% halten dies in der Praxis für unmöglich und fühlen sich dem nicht gewachsen (Studie an 18 Sekundarschulen, Kunze & Solzbacher 2008)
- Binnendifferenzierung in der Praxis nicht häufig eingesetzt
  (Studie mit 295 Lehrern verschiedener Schulformen, Letzel 2021).
- Es fehlt die Zeit zur Diagnose, zur adaptive Material- und Aufgabenauswahl und zur individuellen Unterstützung während des Lernens.

Was ist Heterogenität?

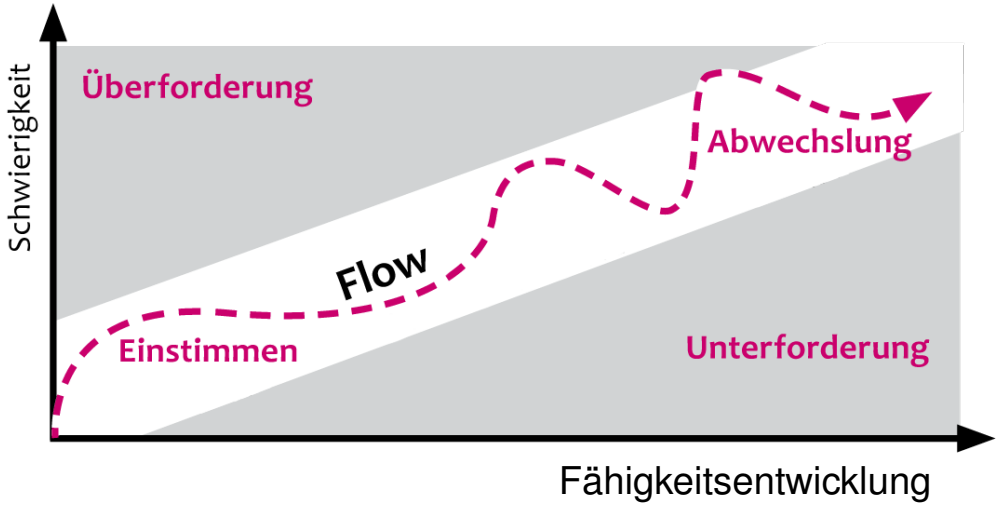
- Lernende unterscheiden sich substantiell (vgl. Höhmann 2009; Trautmann & Wischer 2011), unter anderem in ihrem
  - fachlichen Wissen und Kompetenzen
  - bildungssprachlichen Fähigkeiten
  - kognitiven Eigenschaften
  - Interessen und Motivation
  - soziokulturellen Hintergrund
- Relevant unter vielen Perspektiven:
  - Wertschätzung von Vielfalt
  - Fairness von Tests
  - **Individuelle Förderung**



Klassiker von Hans Traxler aus *betrifft: erziehung, 6/1975*

Individuelle Lernpfade

- Ziel: Lernen als Flow (Csikszentmihalyi 2000) in der entwicklungsproximalen Zone (Vygotsky 1986)

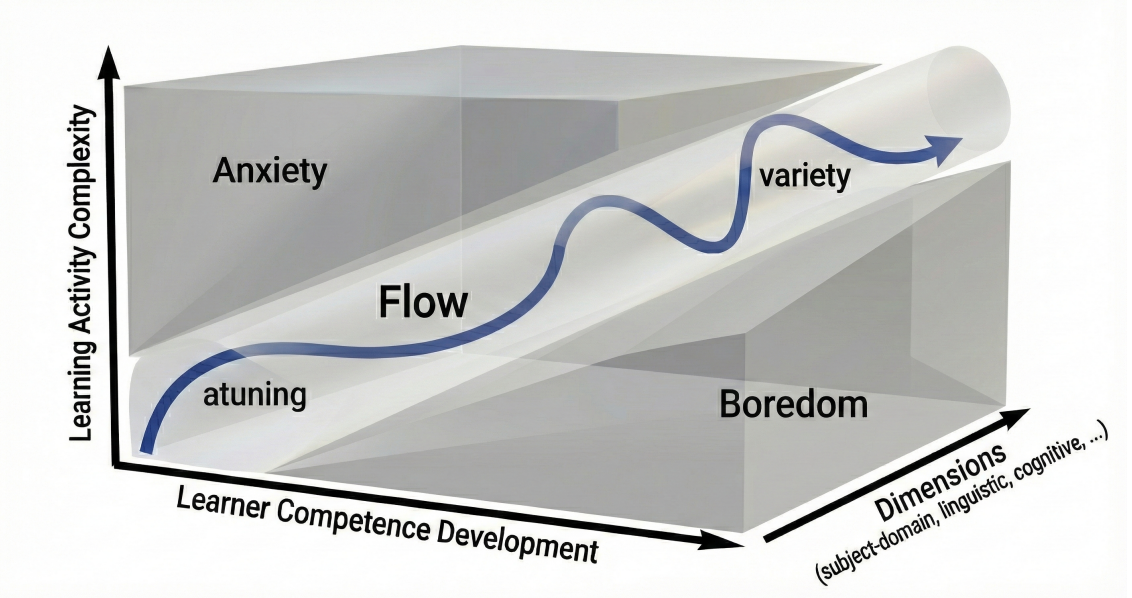


Quelle: studienstrategie.de
& eigene Bearbeitung

- Intelligente Tutorsysteme (ITS) fokussieren dabei auf die fachlichen Kompetenzen.
- Das ignoriert die mehrdimensionale Natur der Heterogenität der Lernenden!
  - Wie fordernd eine Lernaktivität ist, hängt von der Wechselwirkung zwischen dem fachlichen Inhalt und den sprachlichen, kognitiven, . . . Eigenschaften ab.

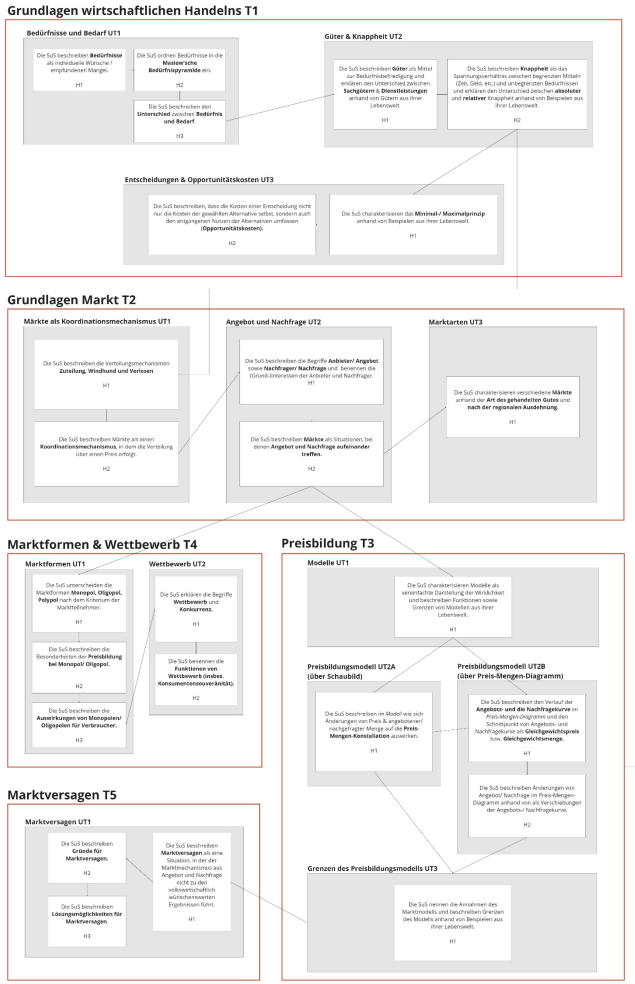
Individuelle Lernpfade, die mehrdimensionale Heterogenität ernst nimmt

- Können wir eine größere Bandbreite von Lernenden unterstützen,
- indem wir adaptiv Lernpfade durch vielfältige Aktivitäten anbieten,
- die systematisch in mehreren Dimensionen variiert sind?
  (sprachlich, kognitiv, . . .)



Konkretisierung anhand Ökonomischer Bildung (BaWü Schulfach “WBS”)

- ALEE.schule: Adaptive Learning in Economics Education
  - Fachdidaktik: Institut für Ökonomische Bildung (IÖB) Oldenburg
  - Bildungsspracherwerb & Computerlinguistik: Tübingen
  - Machine Learning und Systementwicklung: Universität Lüneburg
- Lernzielnetz zum curricularen Themenbereich “Grundlagen wirtschaftlichen Handelns”
- Jedes Lernziel ist ein Knoten im Lernzielnetz, jeweils mit
  - einem Erklärtext
  - mindestens 10 Stammaufgaben
  - zwei Varianten pro Stammaufgabe



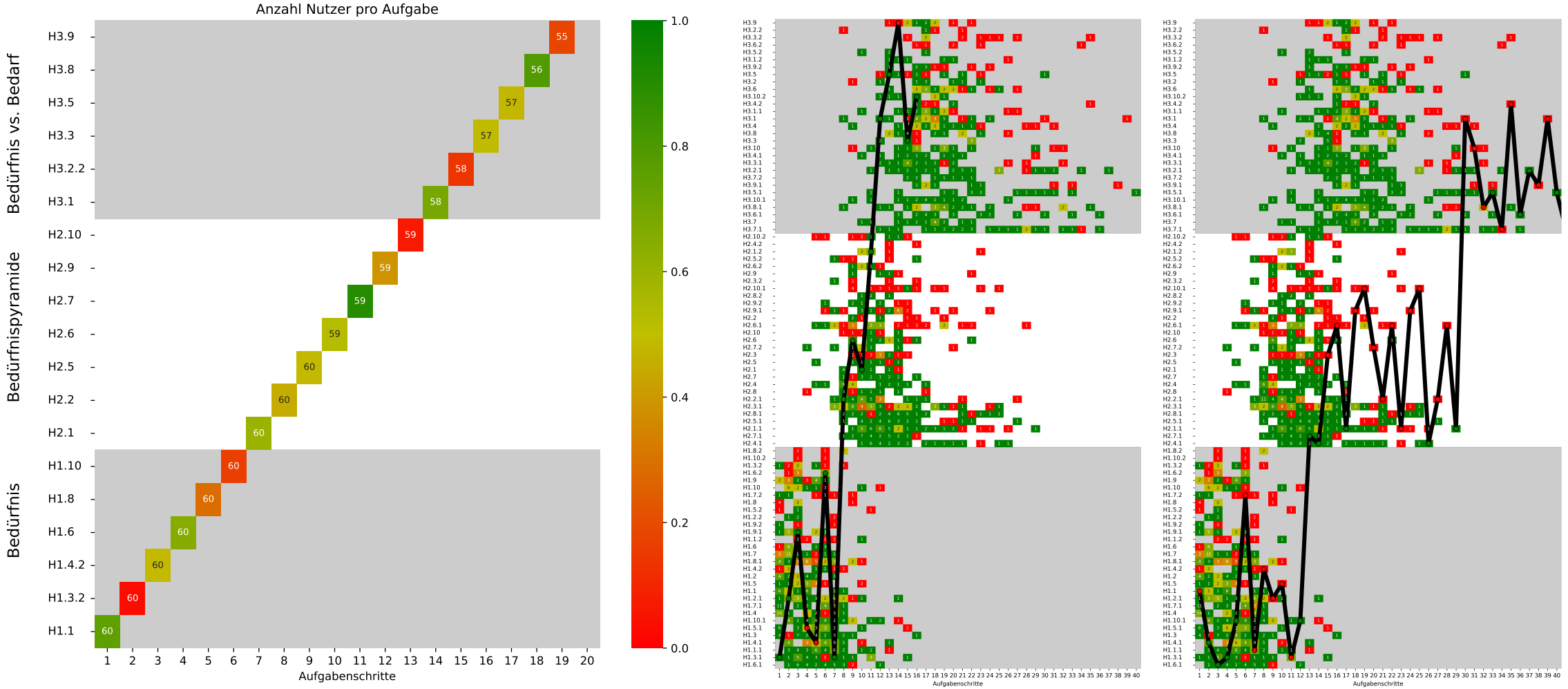
Parameter zur Ausdifferenzierung der Varianten

- **Sprachliche Parameter**
  - Bildungssprachliche Komplexität (Nominalisierung, Deagentivierung, Negation, . . .)
  - Relation der Antwort zum Text (verbatim, paraphrasiert, benötigt Inferenzen, . . .)
- **Kognitive Parameter**
  - Aufgabentyp (MC, FIB, . . .)
  - Anzahl der Antwortmöglichkeiten
  - Anzahl der Distraktoren
  - Falisfizierbarkeit der Distraktoren (im Text, Weltwissen, Domänenwissen)

Was bringen adaptive Lernpfade durch vielfältige Aufgaben?

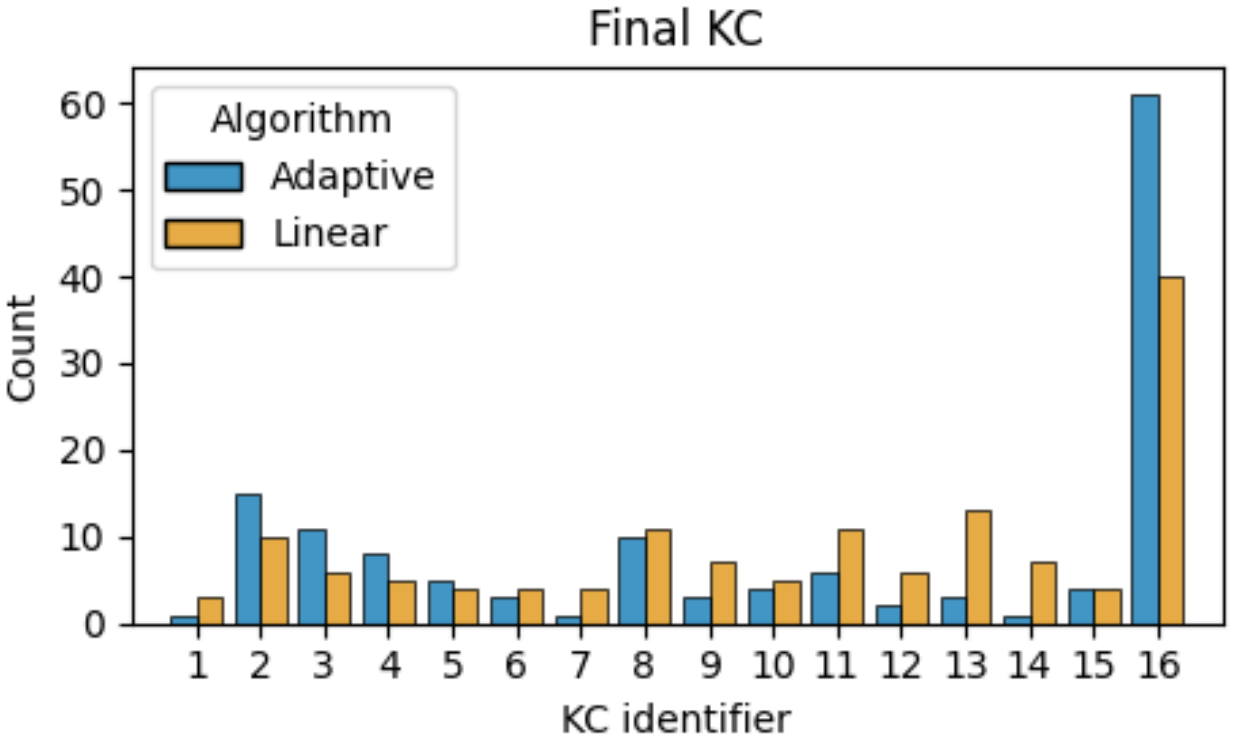
- **randomisierte kontrollierte Feldstudie** im authentischen Kontext der Sekundarstufe:
  - fünfwöchige Intervention im Rahmen des regulären Wirtschaftsunterrichts
  - elf Klassen der Jahrgangsstufen 7–10 an Gymnasien und Oberschulen in Niedersachsen und Bayern
- ALEE ITS mit randomisierter Zuordnung der Schüler innerhalb jeder Klasse:
  - **adaptive Interventionsgruppe** mit individueller Aufgabenzuweisung nach Lösungswahrscheinlichkeit
  - **statische Kontrollgruppe** mit uniformer Aufgabenabfolge (dem schulischen Status Quo)
- n = 279 Schüler (138 adaptiv, 141 statisch)
  - Fragebögen zu Beginn/am Ende der Studie (Motivation, Selbstwirksamkeit, Noten, Interessen, . . .)
  - Lernprozessdaten: $>$ 15k abgeschlossene Aufgaben für $\approx$ 700 Aufgaben zu den 16 Lernthemen

Standardaufgaben vs. vielfältige Aufgaben (fachlich, sprachlich, kognitiv)



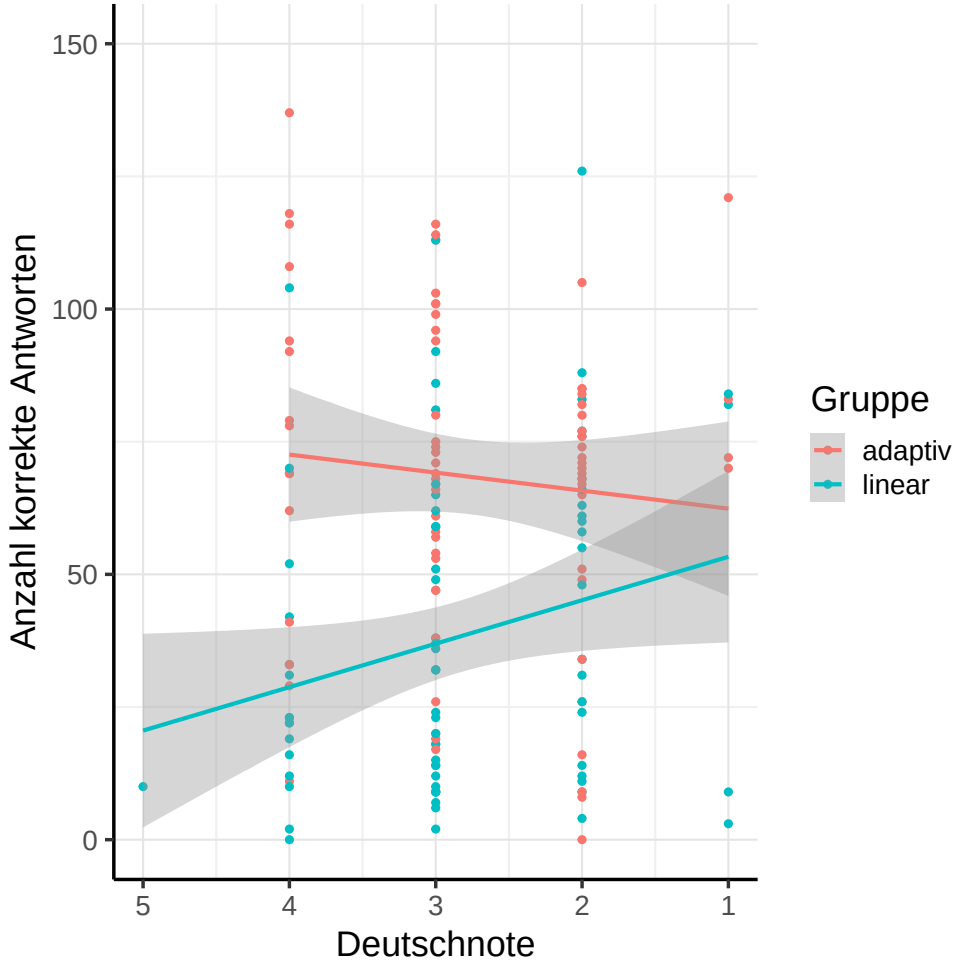
Studienergebnis: Wie viel haben sie gelernt?

⇒ Alle haben gelernt, aber die adaptive Gruppe kam deutlich weiter:

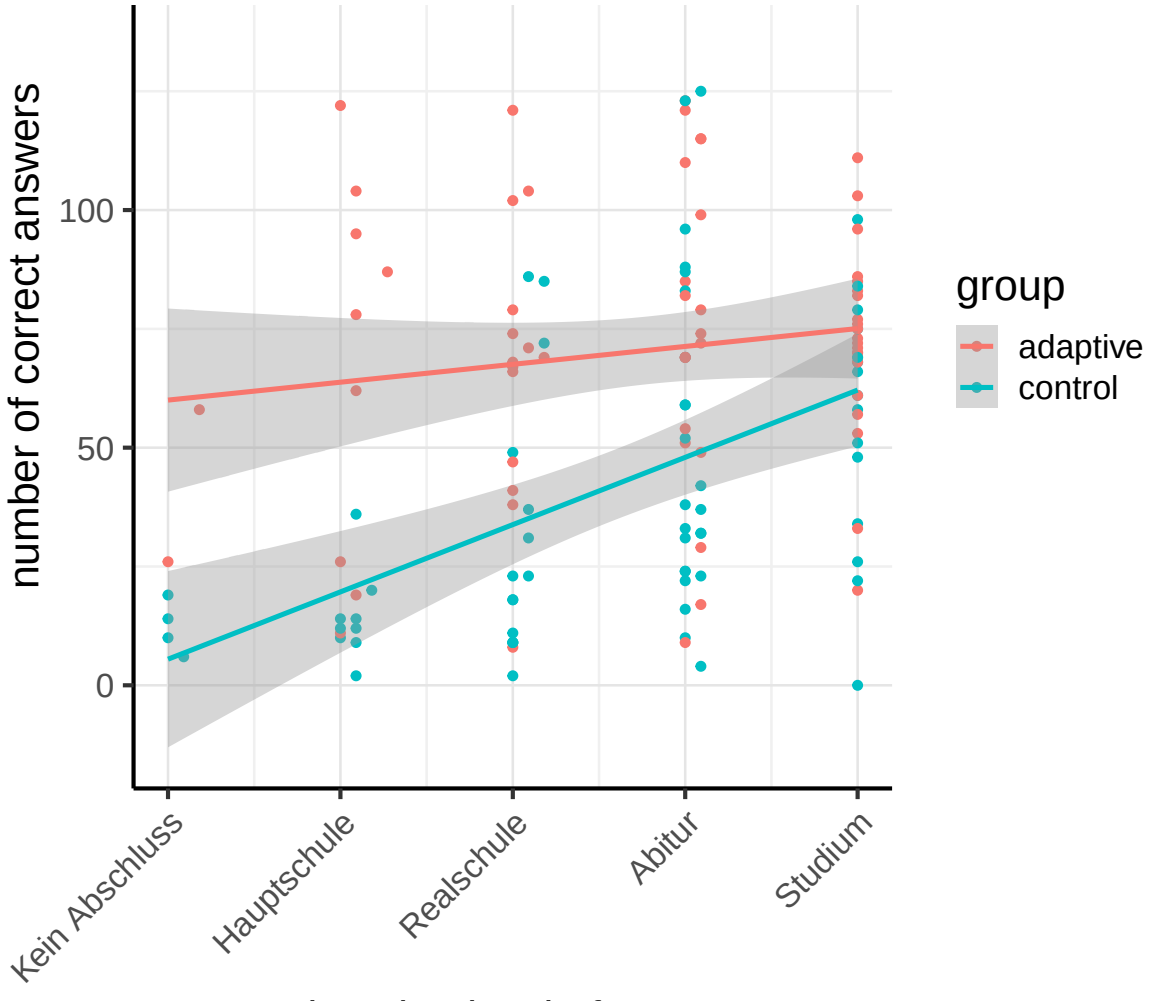


- erreichten Zielkompetenz:
  - 44% der adaptiven Gruppe (61 SuS)
  - 29% der linearen Gruppe (40 SuS)
- schlossen Zielkompetenz ab:
  - 40% der adaptiven Gruppe (56 SuS)
  - 20% der linearen Gruppe (29 SuS)

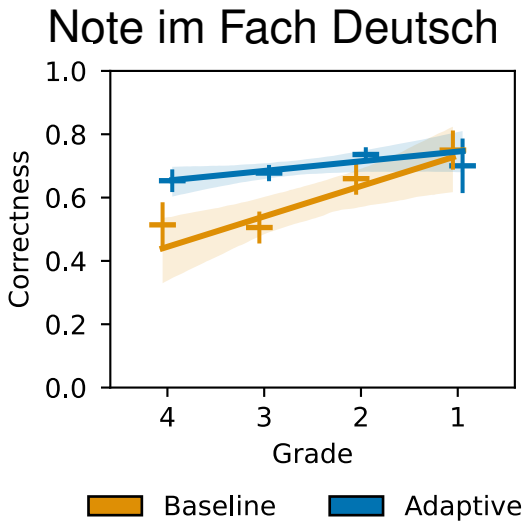
Wer ist erfolgreich? Abhängigkeit des Lernerfolgs von der Deutschnote

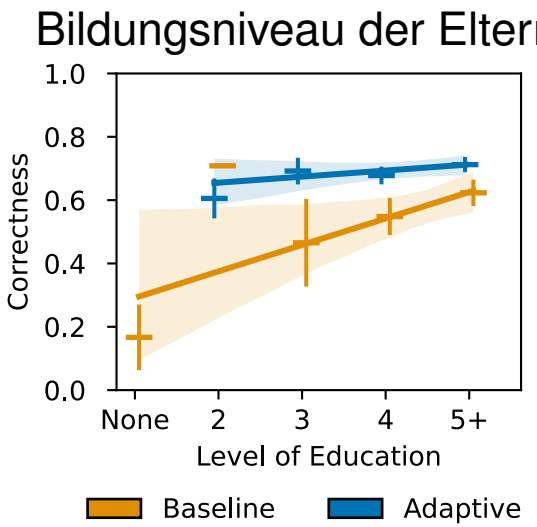


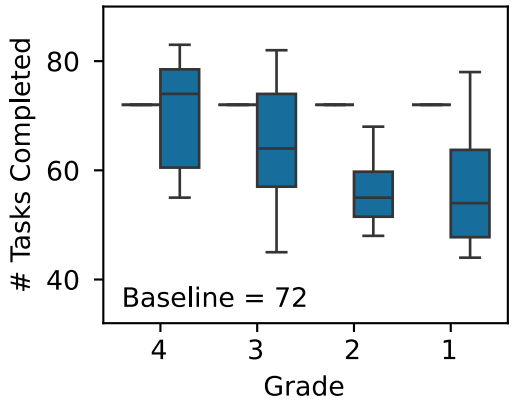
Wer ist erfolgreich? Abhängigkeit des Lernerfolgs von Eltern-Bildungsgrad

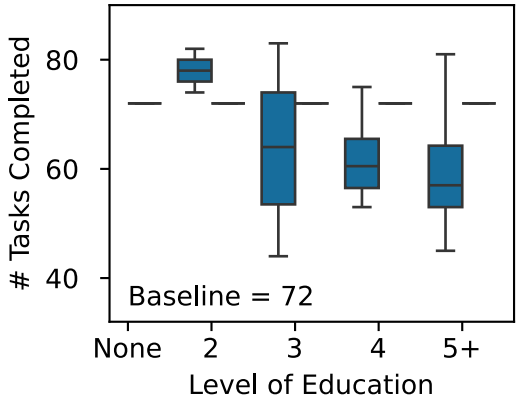


Ergebnis auf Basis der Korrektheitsquoten und Aufgabenanzahl









Adaptiv Lernende signifikant besser in Motivation und Selbstwirksamkeit

+ Ich glaube, ich war in den Aufgaben des Lernsystems ziemlich gut. ($p = 0.01277$)
+ Mit meiner Leistung in dem Lernsystem bin ich zufrieden. ($p = 0.0052$)

– Bei der Bearbeitung der Aufgaben fühlte ich mich angespannt. ($p = 0.0254$)
– Ich hatte Bedenken, ob ich die Aufgaben in dem Lernsystem gut hinbekomme. ($p = 0.0459$)

Zwischenfazit

- Die Förderung heterogener Gruppen benötigt vielfältige Aufgaben (fachlich, sprachlich, kognitiv, Lebensweltbezug, . . .)
- Systematische Aufgabengestaltung und adaptive Sequenzierung ermöglicht
  - größeren fachlichen Lernerfolg,
  - zufriedenere Lernende und
  - mehr Bildungsgerechtigkeit.
- Der Fokus liegt hier auf dem Erwerb der fachlichen Grundlagen
  - Befähigung von möglichst vielen Kindern, um auf dieser Basis dann
  - gemeinsam in der Klasse und bei offeneren Aufgaben mitmachen zu können

$\Rightarrow$ KI-basierter ITS Ansatz ergänzt und unterstützt lehrerorchestrierten Unterricht.

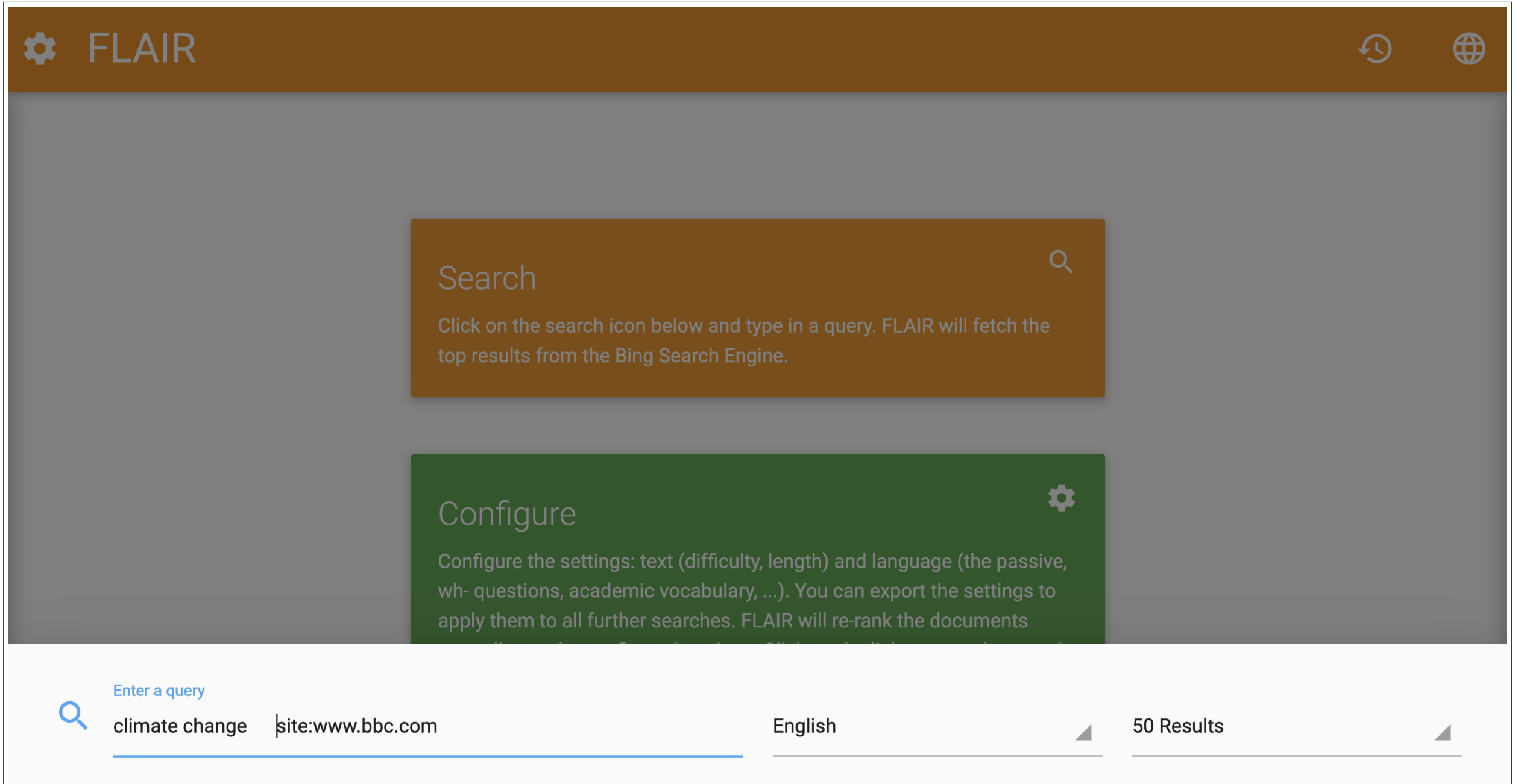
Fremdspracherwerb unterstützen mit KI-Methoden

- Systematische Zweitspracherwerbsforschung (SLA)
  - seit den 60er Jahren (Corder 1967; Selinker 1972), eigenständige Disziplin seit 2000 (Larsen-Freeman 2000)
  - Forschung zu kognitiven, motivationalen, sozialen Faktoren & Instructed SLA zum gesteuerten Erwerb
- Welche etablierte Faktoren und Mechanismen können wir nutzen?
  - Input, Noticing und Erwerbssequenzen (Teachability)
  - Output, Focus-on-Form
  - Üben (Skill Acquisition Theory)
    - Feedback (Scaffolding)
    - Aufgabenorientierung (Task-Based Language Teaching)
- Um welche Herausforderungen zu adressieren?
  - Individuell attraktiver Input, reich an salienten, entwicklungsproximalen sprachlichen Mitteln?
  - Unterstützung beim Output?
  - Üben mit sofortigem, lernförderlichem Feedback im aufgabenorientierten Kontext?

Input – digital unterstützt

- Was heißt entwicklungsproximal? Wie lässt sich die “Interlanguage” von SchülerInnen konkret charakterisieren?
  - Generative KI-Chatbots bieten keine valide GERS Klassifikation! (Benedetto et al. 2025; Kruijsbergen & De Clercq 2024)
  - Computerlinguistische Analyse sprachlicher Komplexität, u.a. mit CTAP (http://ctapweb.com, Chen & Meurers 2016) ist hingegen valide und effektiv nutzbar: http://purl.org/dm/complexity.html
- Wie lässt sich individuell motivierender, entwicklungsproximaler Input identifizieren?
  - Bsp Spezifische KI-basierte Anwendungen: FLAIR Suchmaschine (Englisch, Deutsch; http://flair.schule), KANSAS (Alphabetisierung Deutsch, (http;//kansas-suche.de), LATILL (Deutsch, (http://latill.eu)
  - Bsp Generierung von (multimedialen) Materialien mit generativer KI

FLAIR-Suchmaschine (http://flair.schule, Chinkina & Meurers 2016)



FLAIR

50 Results (0 Filtered)

VISUALIZE

SHARE SEARCH SETUP

Text Characteristics:

Length:

- [ ] Prefer shorter texts.

Levels:

- [x] A1-A2 — 0 / 50
- [x] B1-B2 — 34 / 50
- [x] C1-C2 — 16 / 50

Constructions:

- Sentences
- Parts of Speech

Language Use:

- [ ] Academic Vocabulary

'climate change site:www.bbc.com'

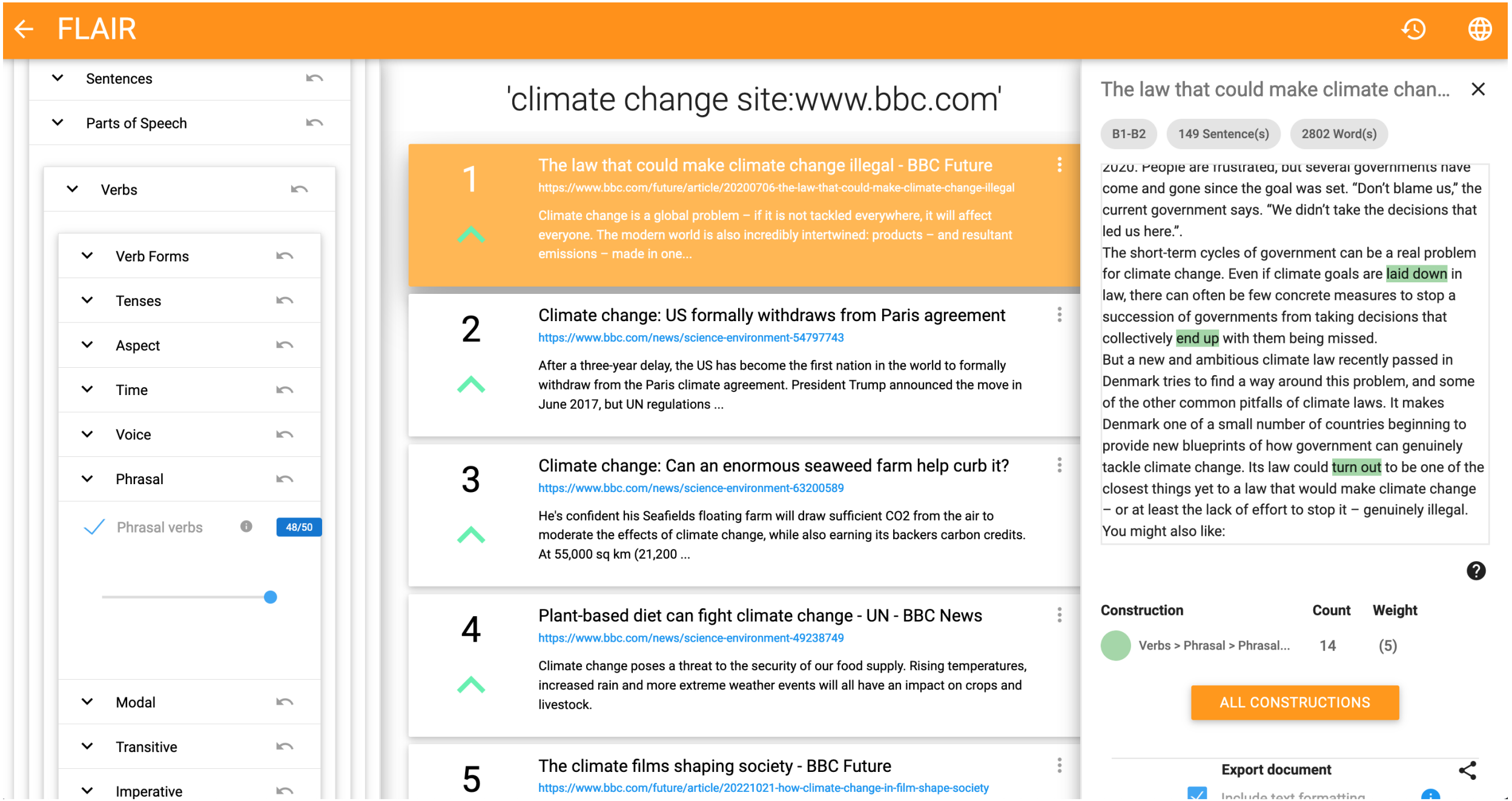
1. **What is climate change? A really simple guide - BBC News**
   https://www.bbc.com/news/science-environment-24021772
   Climate change is a shift in those average conditions. The rapid climate change we are now seeing is caused by humans using oil, gas and coal for their homes, factories and transport. When...

2. **A brief history of climate change - BBC News**
   https://www.bbc.com/news/science-environment-15874560
   Climate change hardly registers on the agenda, which centres on issues such as chemical pollution, atomic bomb testing and whaling. The United Nations Environment Programme (Unep) is formed as a ...

3. **Climate change: IPCC report warns of 'irreversible' impacts ... - ...**
   https://www.bbc.com/news/science-environment-60525591
   The Intergovernmental Panel on Climate Change says that humans and nature are being pushed beyond their abilities to adapt. Over 40% of the world's population are "highly vulnerable" to...

4. **Climate change: 12 years to save the planet? Make that 18 mo...**
   https://www.bbc.com/news/science-environment-48964736
   Prince Charles has stressed how important the next 12 months are in tackling climate change One of the understated headlines in last year's IPCC report was that global emissions of carbon dioxide...

5. **Climate change: Young people very worried - survey - BBC News**
   https://www.bbc.com/news/world-58549373


FLAIR
Sentences
Parts of Speech
Verbs
Verb Forms
Tenses
Aspect
Time
Voice
Phrasal
Phrasal verbs
48/50
Modal
Transitive
Imperative
'climate change site:www.bbc.com'
1
The law that could make climate change illegal - BBC Future
https://www.bbc.com/future/article/20200706-the-law-that-could-make-climate-change-illegal
Climate change is a global problem – if it is not tackled everywhere, it will affect everyone. The modern world is also incredibly intertwined: products – and resultant emissions – made in one...
2
Climate change: US formally withdraws from Paris agreement
https://www.bbc.com/news/science-environment-54797743
After a three-year delay, the US has become the first nation in the world to formally withdraw from the Paris climate agreement. President Trump announced the move in June 2017, but UN regulations ...
3
Climate change: Can an enormous seaweed farm help curb it?
https://www.bbc.com/news/science-environment-63200589
He's confident his Seafields floating farm will draw sufficient CO2 from the air to moderate the effects of climate change, while also earning its backers carbon credits. At 55,000 sq km (21,200 ...
4
Plant-based diet can fight climate change - UN - BBC News
https://www.bbc.com/news/science-environment-49238749
Climate change poses a threat to the security of our food supply. Rising temperatures, increased rain and more extreme weather events will all have an impact on crops and livestock.
5
The climate films shaping society - BBC Future
https://www.bbc.com/future/article/20221021-how-climate-change-in-film-shape-society
The law that could make climate chan...
B1-B2
149 Sentence(s)
2802 Word(s)
2020. People are frustrated, but several governments have come and gone since the goal was set. “Don’t blame us,” the current government says. “We didn’t take the decisions that led us here.”.
The short-term cycles of government can be a real problem for climate change. Even if climate goals are laid down in law, there can often be few concrete measures to stop a succession of governments from taking decisions that collectively end up with them being missed.
But a new and ambitious climate law recently passed in Denmark tries to find a way around this problem, and some of the other common pitfalls of climate laws. It makes Denmark one of a small number of countries beginning to provide new blueprints of how government can genuinely tackle climate change. Its law could turn out to be one of the closest things yet to a law that would make climate change – or at least the lack of effort to stop it – genuinely illegal.
You might also like:
Construction
Count
Weight
Verbs > Phrasal > Phrasal...
14
(5)
ALL CONSTRUCTIONS
Export document
Include text formatting

Authentische Materialien sind nicht immer verfügbar → Generative KI

Bsp Ein schottischer Wetterbericht: (generiert mit ChatGPT-4o)

Bsp Ein einfacher Text zu einem frei gewählten Thema (generiert mit Gemini 3.1 Pro):

Generate a short text about the zoo in London in simple language and mark all connectives.

A Trip to the London Zoo

The London Zoo is a great place to visit. It is very old, **and** it has many amazing animals. Many families go there **because** it is fun. You can see tall giraffes, big tigers, **and** funny penguins. There are many things to do, **so** you will not get bored.

Herausforderung bei der Generierung von Materialien mit generativer KI

But the "and" in the sentence You can see tall giraffes, big tigers, and funny penguins is a coordination of noun phrases, not a connective linking sentences!

But the "and" in the sentence You can see tall giraffes, big tigers, and funny penguins is a coordination of noun phrases, not a connective linking sentences!

Gedankengang anzeigen

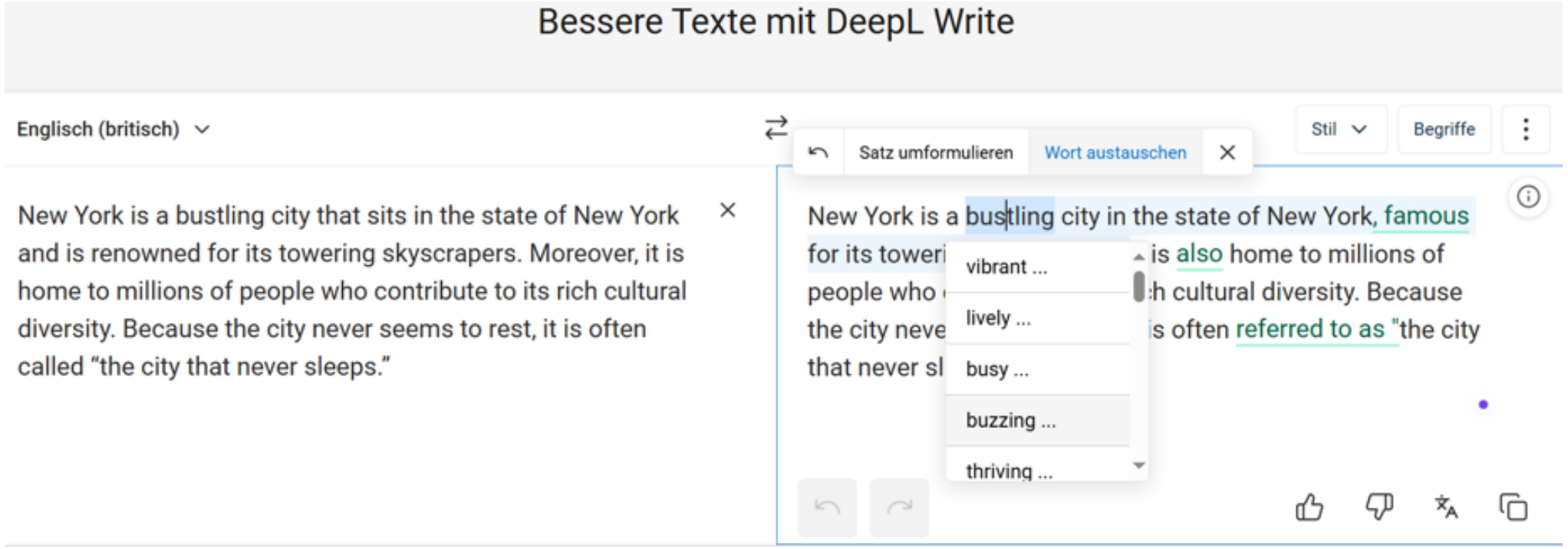
You are absolutely right. Great catch!

- Wer generative KI nutzt, sollte die Qualität der Ausgabe bewerten können!

Output – digital unterstützt

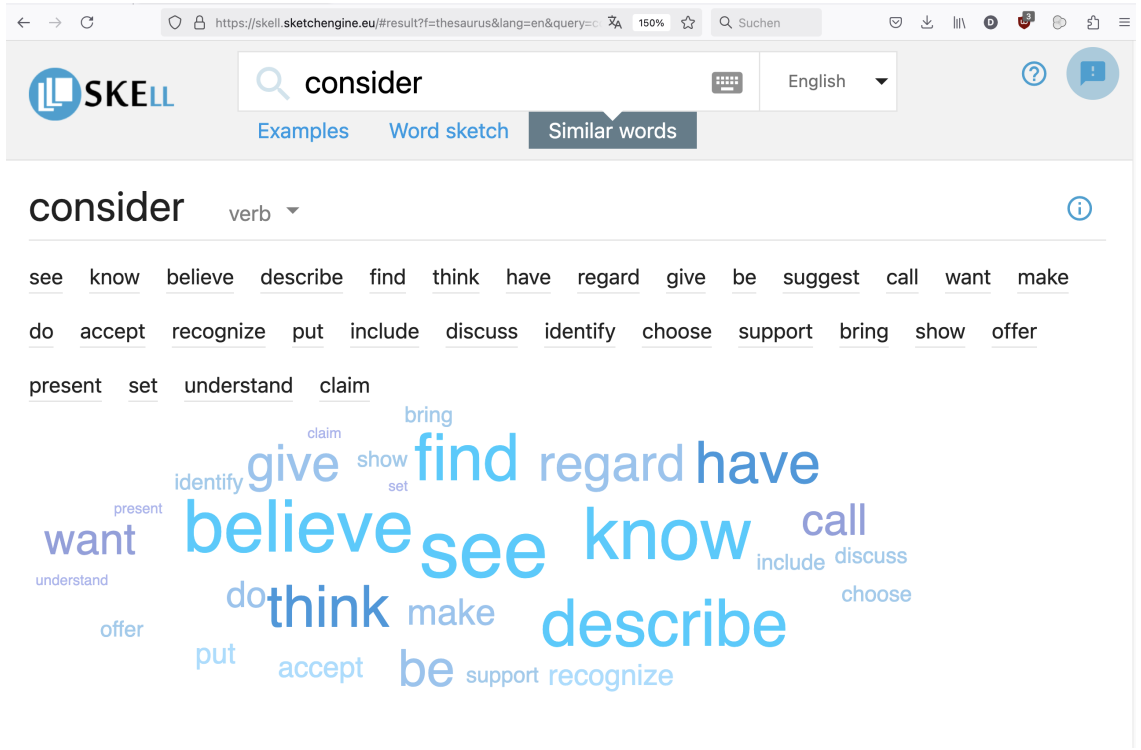
- **Output** hypothesis (Swain 2005)
  - Sprachproduktion essentiell, da nur dann explizite Ausspezifikation erforderlich ist (bei Sprachrezeption muss durch Redundanz nicht alles dekodiert werden)
- Generative KI ist optimiert auf sprachlichen Output
  - ↯ Bei Nutzung zur Output-Unterstützung durch Lernende Gefahr von Skill-Skipping
- Sinnvolle Unterstützung von Fortgeschrittenen bei der Suche nach Formulierungsalternativen
  - Allgemeine Chatbots mit spezifischen Prompts prinzipiell nutzbar
  - Bsp Spezifische KI-basierte Reformulierungs-Tools (http://deepl.com/write)
  - Bsp Korpusbasierte Tools (https://www.sketchengine.eu/skell)

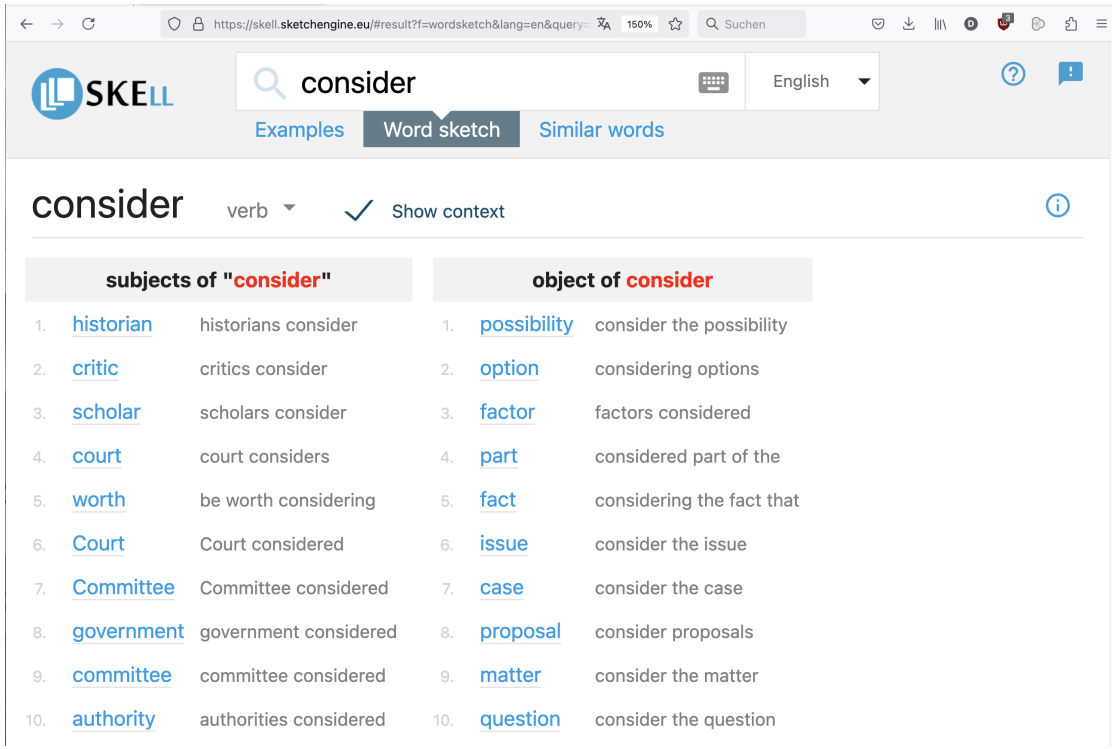
Output – digital unterstützt mit spezifischem KI-Tool



Output – digital unterstützt mit korpusbasiertem Tool

- Werkzeuge, die kuratierte Korpora nutzen, können gezielter unterstützen: Sketch Enginge for Language Learners (SkELL)





Üben

- Skill Acquisition Theory (DeKeyser 2005)
  - Unterricht vermittelt Wissen, danach ist **Üben** für automatisierte Fertigkeiten erforderlich.
  - Ziel: flüssige Fähigkeit, die keine Aufmerksamkeit bindet

⇒ Intelligente Tutorsysteme können von Lehrkraft orchestrierten Unterricht ergänzen

Feedback während der Bearbeitung einer Aufgabe (Mikro-Adaptivität)
individuelle Auswahl von Lernaktivitäten (Makro-Adaptivität)

Bsp Intelligentes Tutorsystem FeedBook (Rudzewitz et al. 2017; Meurers et al. 2019)

Üben – digital unterstützt im ITS FeedBook

AUSGANGS-PUNKT

Grammar check: **Problems**

Everyone has got problems. What could these people do differently?

0. Gillian is sad. Her mother never has any time for her.

If Mrs Collins had more time for Gillian, Gillian wouldn't be so sad.

1. Mrs Collins feels bad. She should listen more to Gillian.

If she listen more to Gillian, she fee

2. Gwynn is very disappointed. Gillian doesn't like Wildings School as much as

If Gillian like Wilding School as much

ZIEL

2 Welcome to Wales

CYP 2 **Grammar check: Problems**

Everyone has got problems. What could these people do differently? Use conditional clauses in your answers.

0. Gillian is sad. Her mother never has any time for her.

If Mrs. Collins had more time for Gillian, Gillian wouldn't be so sad.

1. Mrs Collins feels bad. She should listen more to Gillian.

If she listens more to Gillian, she feels better.

2. Gwynn is very disappointed. Gillian doesn't like Wilding

3. George and Rajiv feel bad because they don't have a pres

Feedback für "If she listens more to Gillian, she..."

With conditional clauses (type 2), we use the simple past in the if-clause, not the simple present.

Hilfreich? Ja Nein OK

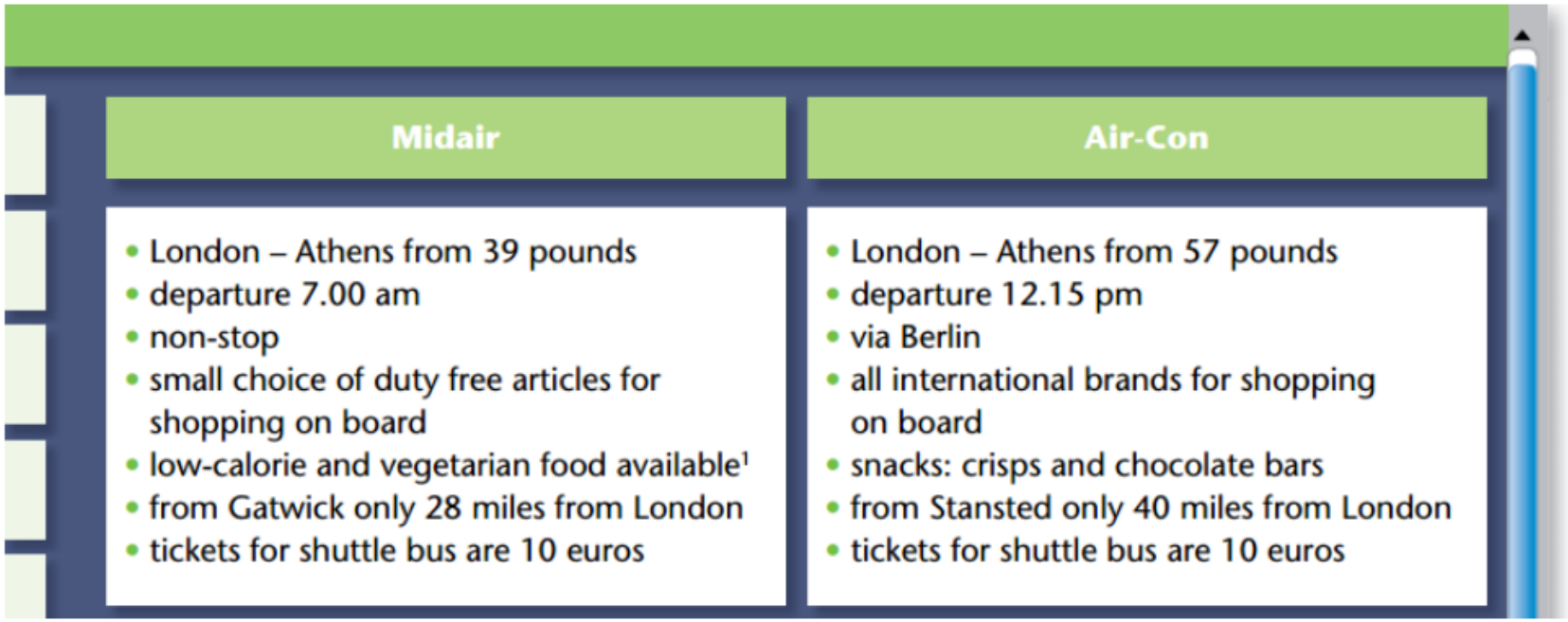
FeedBook: Feedback zu sprachlichen Formen

B1 Off to Greece again

Mr Lambraki is checking flights to Greece. Read the information he has found on the two airlines and use the adjectives below to compare them.

- *LiF8R: Comparison of adjectives*

expensive (ticket) · early (departure) · attractive (shopping on board) · good (choice of food offered on board) · healthy (food and drinks) · suitable (airport) · cheap (tickets for shuttle bus) · friendly (service on board) · easy (online booking)



Midair	Air-Con
• London – Athens from 39 pounds • departure 7.00 am • non-stop • small choice of duty free articles for shopping on board • low-calorie and vegetarian food available[1] • from Gatwick only 28 miles from London • tickets for shuttle bus are 10 euros	• London – Athens from 57 pounds • departure 12.15 pm • via Berlin • all international brands for shopping on board • snacks: crisps and chocolate bars • from Stansted only 40 miles from London • tickets for shuttle bus are 10 euros

1.

The tickets at Air-Con are expensiver than at Midair.

2.

FeedBook: Feedback zu sprachlichen Formen

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Feedback für "The tickets at Air-Con are expensiv..."

When an adjective has three or more syllables, we form the comparative with 'more' and the superlative with 'most'.

Hilfreich? ◯Ja ◯Nein OK

1. *The tickets at Air-Con are expensiver than at Midair.*

2.

FeedBook: Feedback zu sprachlicher Bedeutung und Formen

B1 Gillian's diary

Read Gillian's diary entry and complete these sentences.

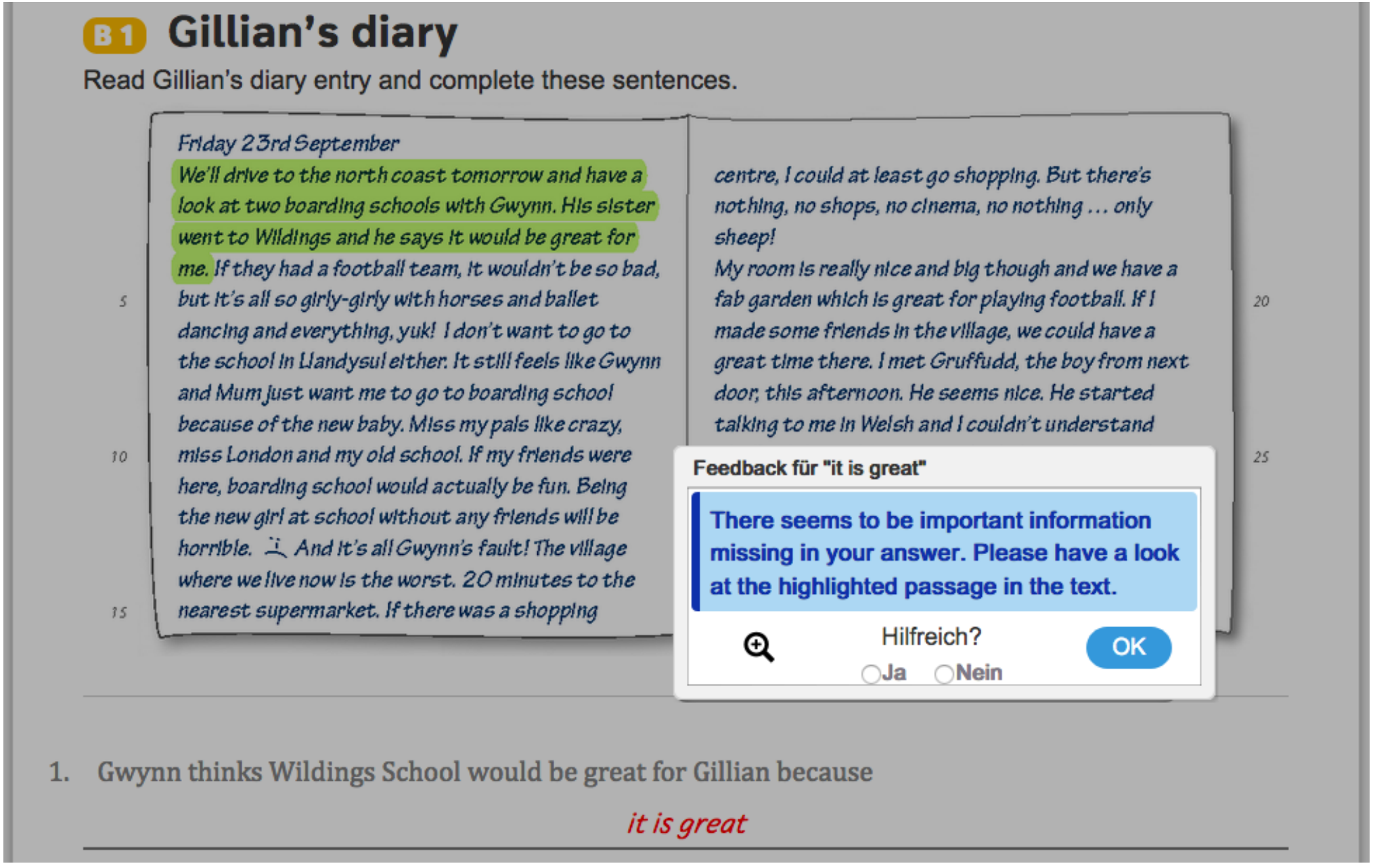


Friday 23rd September
We'll drive to the north coast tomorrow and have a look at two boarding schools with Gwynn. His sister went to Wildings and he says it would be great for me. If they had a football team, it wouldn't be so bad, but it's all so girly-girly with horses and ballet dancing and everything, yuk! I don't want to go to the school in Llandysul either. It still feels like Gwynn and Mum just want me to go to boarding school because of the new baby. Miss my pals like crazy, miss London and my old school. If my friends were here, boarding school would actually be fun. Being the new girl at school without any friends will be horrible. :(And it's all Gwynn's fault! The village where we live now is the worst. 20 minutes to the nearest supermarket. If there was a shopping centre, I could at least go shopping. But there's nothing, no shops, no cinema, no nothing … only sheep!
My room is really nice and big though and we have a fab garden which is great for playing football. If I made some friends in the village, we could have a great time there. I met Gruffudd, the boy from next door, this afternoon. He seems nice. He started talking to me in Welsh and I couldn't understand ANYTHING. He then spoke English and told me he plays rugby. Well, it's not football but I might have to learn to like it. They all love rugby here.
Aargh, if I had some credit on my phone, I could call Caroline. Hope I get some pocket money tomorrow.

1. Gwynn thinks Wildings School would be great for Gillian because

it is great

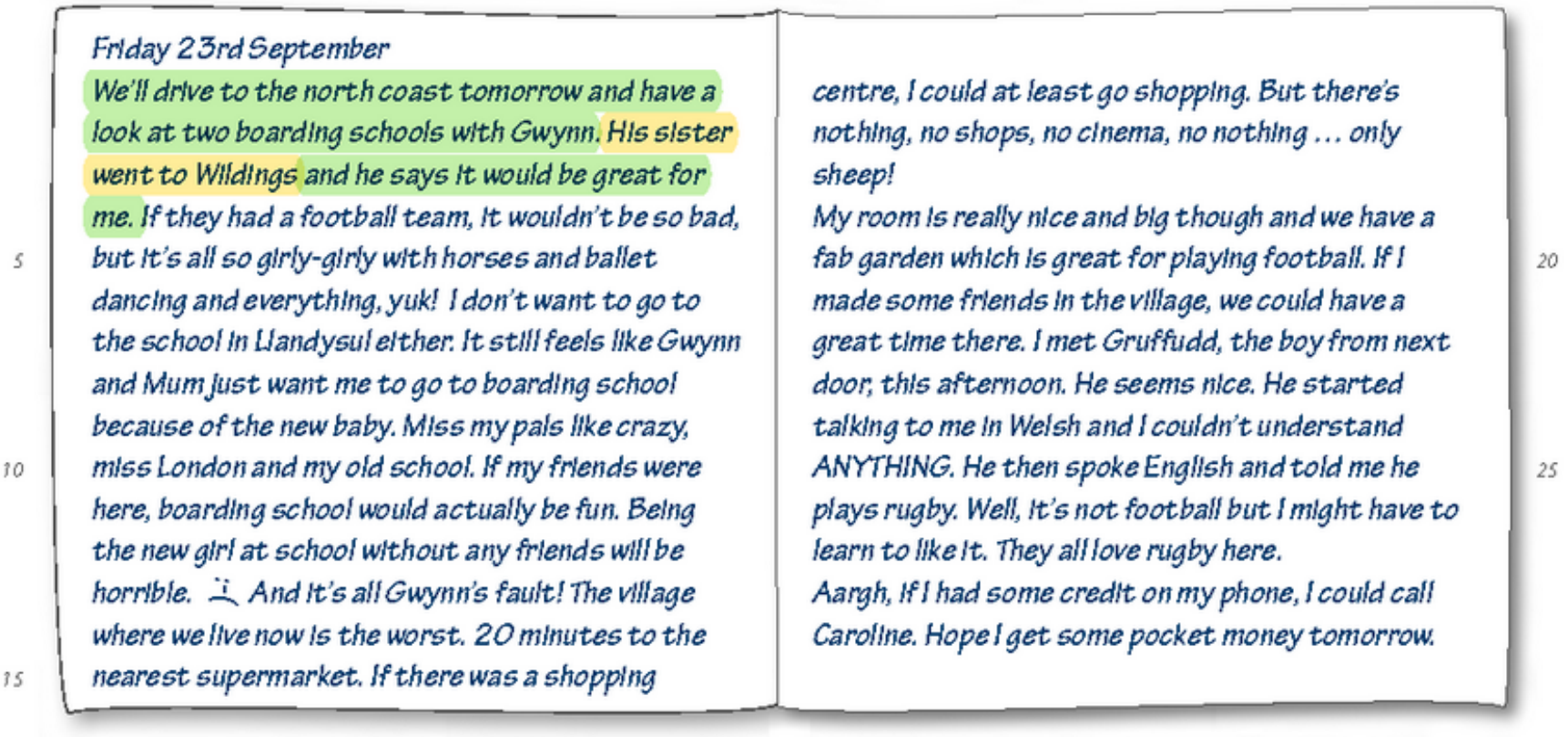
FeedBook: Feedback zu sprachlicher Bedeutung und Formen



FeedBook: Feedback zu sprachlicher Bedeutung und Formen

B1 Gillian's diary

Read Gillian's diary entry and complete these sentences.



Friday 23rd September

We'll drive to the north coast tomorrow and have a look at two boarding schools with Gwynn. His sister went to Wildings and he says it would be great for me. If they had a football team, it wouldn't be so bad, but it's all so girly-girly with horses and ballet dancing and everything, yuk! I don't want to go to the school in Llandysul either. It still feels like Gwynn and Mum just want me to go to boarding school because of the new baby. Miss my pals like crazy, miss London and my old school. If my friends were here, boarding school would actually be fun. Being the new girl at school without any friends will be horrible. ☹ And it's all Gwynn's fault! The village where we live now is the worst. 20 minutes to the nearest supermarket. If there was a shopping centre, I could at least go shopping. But there's nothing, no shops, no cinema, no nothing … only sheep!

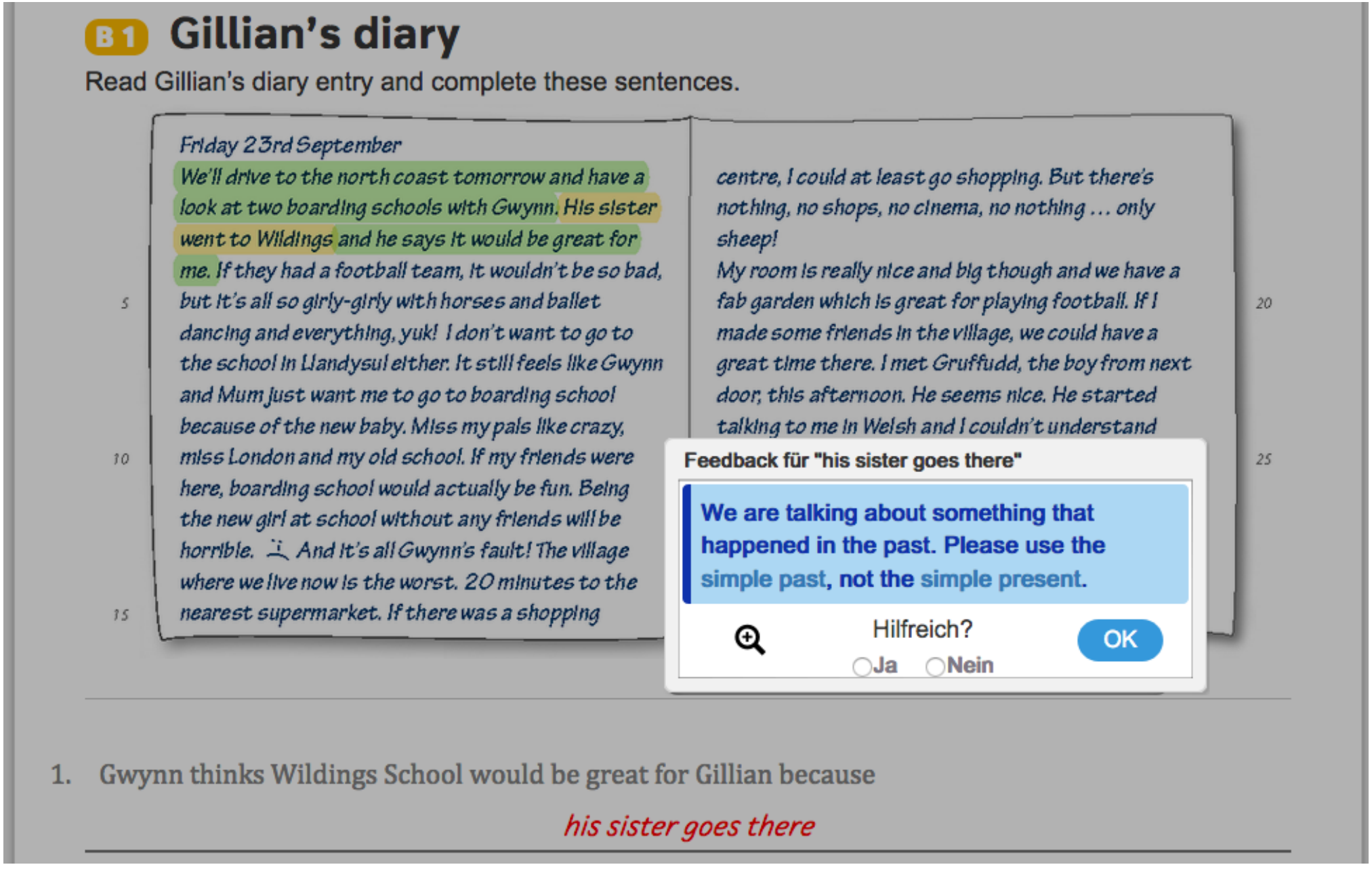
My room is really nice and big though and we have a fab garden which is great for playing football. If I made some friends in the village, we could have a great time there. I met Gruffudd, the boy from next door, this afternoon. He seems nice. He started talking to me in Welsh and I couldn't understand ANYTHING. He then spoke English and told me he plays rugby. Well, it's not football but I might have to learn to like it. They all love rugby here.

Aargh, if I had some credit on my phone, I could call Caroline. Hope I get some pocket money tomorrow.

1. Gwynn thinks Wildings School would be great for Gillian because

his sister goes there

FeedBook: Feedback zu sprachlicher Bedeutung und Formen



B1 **Gillian's diary**

Read Gillian's diary entry and complete these sentences.

Friday 23rd September

We'll drive to the north coast tomorrow and have a look at two boarding schools with Gwynn. His sister went to Wildings and he says it would be great for me. If they had a football team, it wouldn't be so bad, but it's all so girly-girly with horses and ballet dancing and everything, yuk! I don't want to go to the school in Llandysul either. It still feels like Gwynn and Mum just want me to go to boarding school because of the new baby. Miss my pals like crazy, miss London and my old school. If my friends were here, boarding school would actually be fun. Being the new girl at school without any friends will be horrible. ☹ And it's all Gwynn's fault! The village where we live now is the worst. 20 minutes to the nearest supermarket. If there was a shopping centre, I could at least go shopping. But there's nothing, no shops, no cinema, no nothing … only sheep!

My room is really nice and big though and we have a fab garden which is great for playing football. If I made some friends in the village, we could have a great time there. I met Gruffudd, the boy from next door, this afternoon. He seems nice. He started talking to me in Welsh and I couldn't understand

Feedback für "his sister goes there"

We are talking about something that happened in the past. Please use the simple past, not the simple present.

Hilfreich? ○Ja ○Nein OK

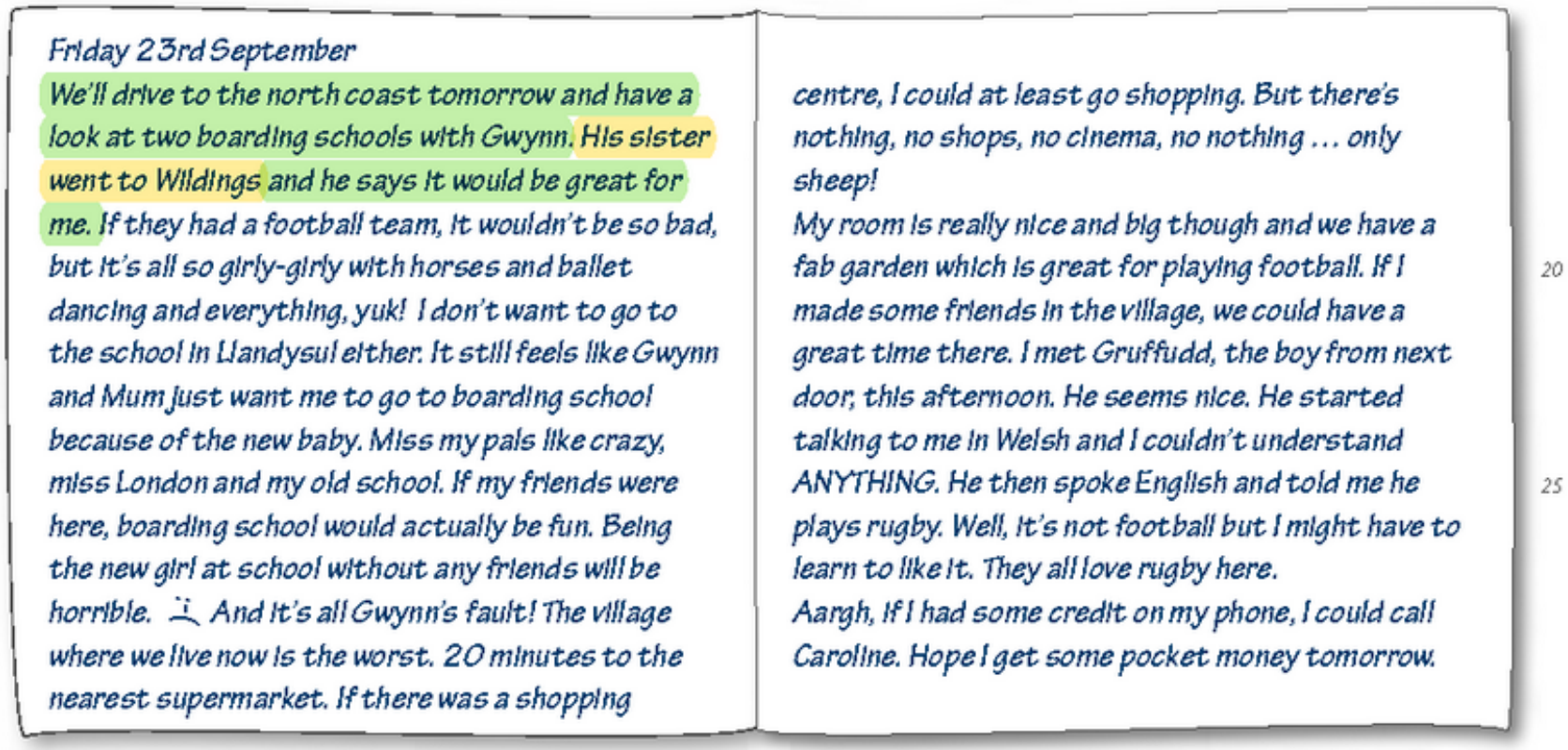
1. Gwynn thinks Wildings School would be great for Gillian because

his sister goes there

FeedBook: Feedback zu sprachlicher Bedeutung und Formen

B1 Gillian's diary

Read Gillian's diary entry and complete these sentences.



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Aargh, if I had some credit on my phone, I could call Caroline. Hope I get some pocket money tomorrow.

1. Gwynn thinks Wildings School would be great for Gillian because

his sister went there

Üben – digital unterstützt und empirisch evaluiert

- Das FeedBook deckt die sprachlichen Mittel des Englisch-Bildungsplans der 7. Klasse in Baden-Württemberg ab → unterstützt ganzjährige randomisierte Feldstudien
- RCT: Verbessert Feedback während des individuellen Übens das Erlernen der sprachlichen Mittel des Bildungsplans? (Meurers et al. 2019)
  - Zehn reguläre Englischklassen in der 7. Klasse an Gymnasien, FeedBook als Arbeitsheft.
  - Within-class randomization: Wer erhält für welche sprachlichen Mittel spezifisches Feedback?

  ⇒ Feedback verbessert Lernerfolg um 63% (Cohens d = 0.56)
- Interact4School RCT: mit 847 SchülerInnen aus 36 Klassen im Fach Englisch, 7. Klasse

  ⇒ motivationales Feedback durch Avatar nach korrekter Aufgabenabgabe ist nur anfänglich effektiv

  ⇒ aufgabenorientiertes Dashboard führte zu signifikant höheren Lernzuwächsen
- AI2Teach: Lehrer-Dashboards (Colling 2026) und Fortbildungen

  ⇒ wichtig zur Integration von individueller Förderung mit KI und Lehrkraft-orchestrierten Unterricht

Zusammenfassung

- KI ist kein Deus-ex-Machina
  - Allgemeine generative KI-Tools sind optimiert für die Produktion von Sprache – nicht Bildungsaspekte.
  - Für valide sprachliche Diagnostik, Interpretation von Lernprozessen & Exploration didaktischer Möglichkeiten zum Erreichen curricularer Ziele bleibt spezifische fachliche Expertise zentral.
- Gezielt eingesetzt können KI-Methoden helfen
  - den Erwerb fachlicher Grundlagen in heterogene Gruppen besser zu fördern: adaptive Lernpfade
  - den Fremdspracherwerb zu unterstützen: Input, Noticing, Output, Üben mit Feedback, Interaktion
- Nutzung von KI-Methoden ist da sinnvoll und effektiv, wo sie konkrete Herausforderungen auf Basis nachgewiesener Mechanismen mit einem konkreten Ziel adressiert.
  - Die KI-Methoden sollten dabei die Lehrkraft und den gemeinsamen Unterricht ergänzen.
  - KI-Methoden sind (nur) ein Werkzeug, dessen valide Nutzung nur die Lehrkraft sicherstellen kann.

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