



Exception: Logos on this slide, Anki-Screenshots

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Spaced repetition with digital flashcards

A digitally assisted learning designed created by the DigiTeLL-partnership project
“Doppeldecker Toolkit für digitalisierungsbezogene Kompetenzen in der
Lehrkräfteausbildung”



Stiftung
Innovation in der
Hochschullehre



Learning Goals of this Learning Design

- You can explain the most important terms, theories and interrelations of a seminar-specific topic by relating to examples and naming important authors in the field (seminar-specific competency).
- You can use the software „Anki“ to create digital flashcards for spaced repetition (digitalisation-related competency).
- You can reflect about advantages and backside of digital supported spaced repetition (digitalisation-related competency, lesson planning competency).



SPACED REPETITION – A HELPFUL STUDY STRATEGY

Warm-Up

How do you usually study for exams?

Talk with your neighbour and come up with three tips for effective exam preparation.

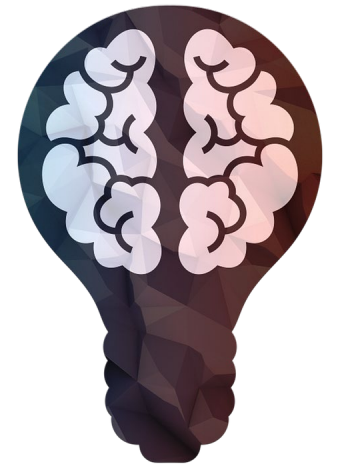


One memorisation strategy to keep in mind: **Spaced Repetition**

- Memory technique that involves repeatedly recalling information at intervals of time that increase in length (a subtype of **distributed practice**)
- Usually performed with flashcards
- Common technique for practicing vocabulary
- Opposed to **massed practice**: memorising a large amount of information in one study session in a short amount of time

Why is spaced repetition important for you?

- **Spaced practice is empirically proven to be more effective than massed practice**
- teachers should incorporate spaced repetition into their teaching and train their students to use this memorising technique independently



Source: Kim, Su Kyung/Webb, Stuart (2022): The Effects of Spaced Practice on Second Language Learning: A Meta-Analysis. *Language Learning*, pp. 269-319.

Tips for designing flashcards for spaced repetition

1. Do not include too much information on one study card.
2. Use different colours for marking different types of information (e.g. red for central terms, blue for examples...)
3. Use pictures, graphs and sounds on your flashcards.
4. Use your own examples.
5. Include sources and page numbers on your flashcards.
6. Design overview cards as an addition to your flashcards.
7. Order your cards by topic.

Advantages of **digital** flashcards for spaced repetition

1. You can easily include pictures, audio and video to your cards.
2. You can store your flashcards on your mobile phone and study them everywhere (e.g. in the bus).
3. You can easily share your flashcards with your friends.
4. Your flashcards are automatically sorted for you in relation to your response behaviour or by keywords.
5. Your cards can be easily adjusted.

ANKI – A DIGITAL
FLASHCARD TOOL FOR
SPACED REPETITION

Example Software: Anki

- Software for creating digital flashcards for spaced repetition
- Originally invented for learning foreign languages but can be used for all kinds of content
- „Anki“ (暗記) is Japanese for „learning by heart“
- Can be used on Windows, Linux, MacOS, iOS and iPadOS
- Accounts on different devices can be synchronised via the web application
- Download Anki for your operating system on: [Anki Website](https://www.ankiweb.net/)



HOW TO ANKI: On the next slides you will learn how to...

- ... import a card deck into the Anki Desktop App.
- ... study with a card deck on the Anki Desktop App.
- ... create cards with the Anki Desktop App.
- ... export a card deck that you created.
- ... synchronise your card decks with the Anki web app (especially important for iOS and iPadOS users).

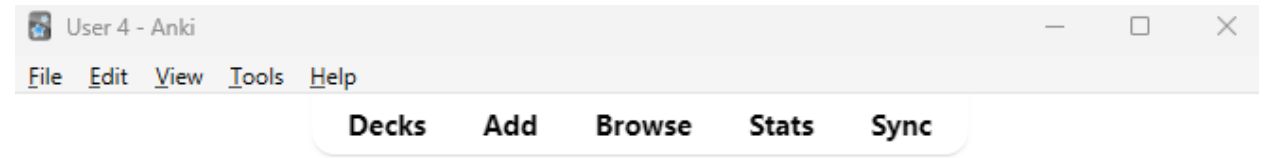
How to import a deck into the Anki app

- Download a deck on: [Shared Decks on the Anki Website](#)
- Click on the downloaded file. If you have installed the Anki app on your device, it will be imported to the app automatically

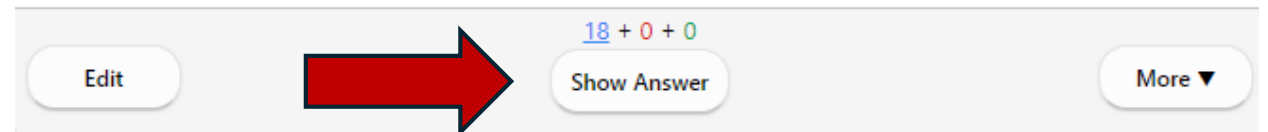
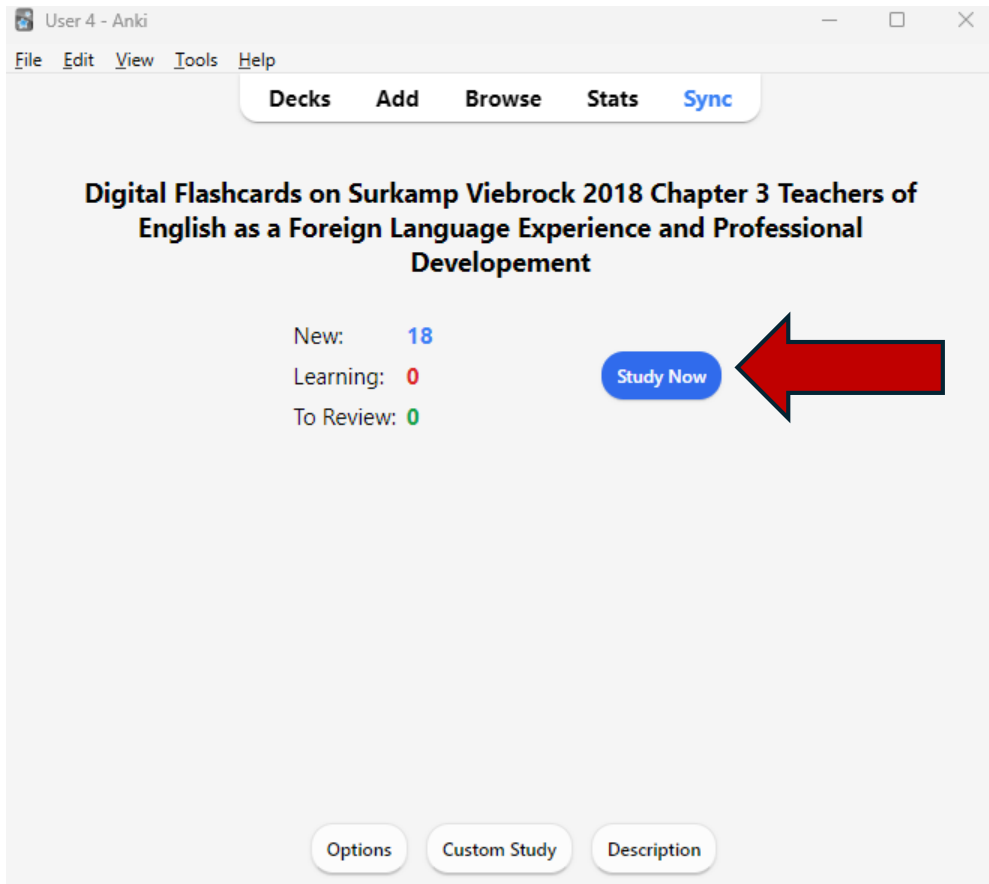


How to study with the Anki app

1. Open the Anki App.
2. Click on the deck you want to revise and then on „study now“
3. Answer the question on the card.
4. Click on „Show Answer“.

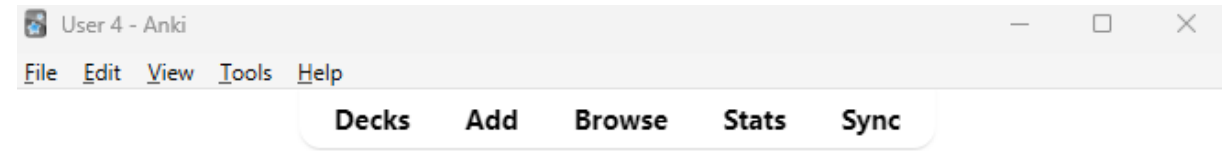


Viebrock (2018), p. 50: What are the three models of teacher education distinguished by Wallace (1991)?

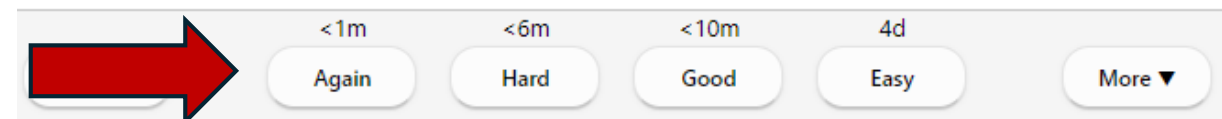
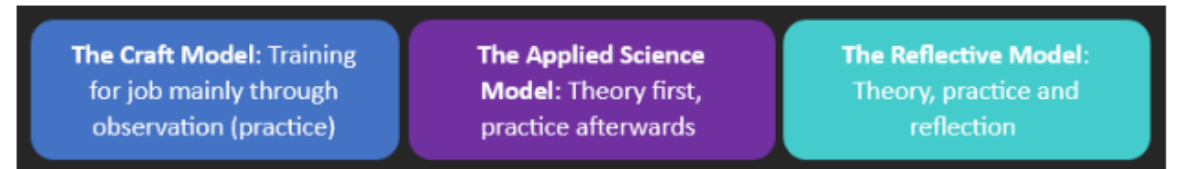


How to study with the Anki app - continued

4. Read through the answer shown to you.
5. Evaluate the respective card's level of difficulty.
→ Anki will sort your cards accordingly.



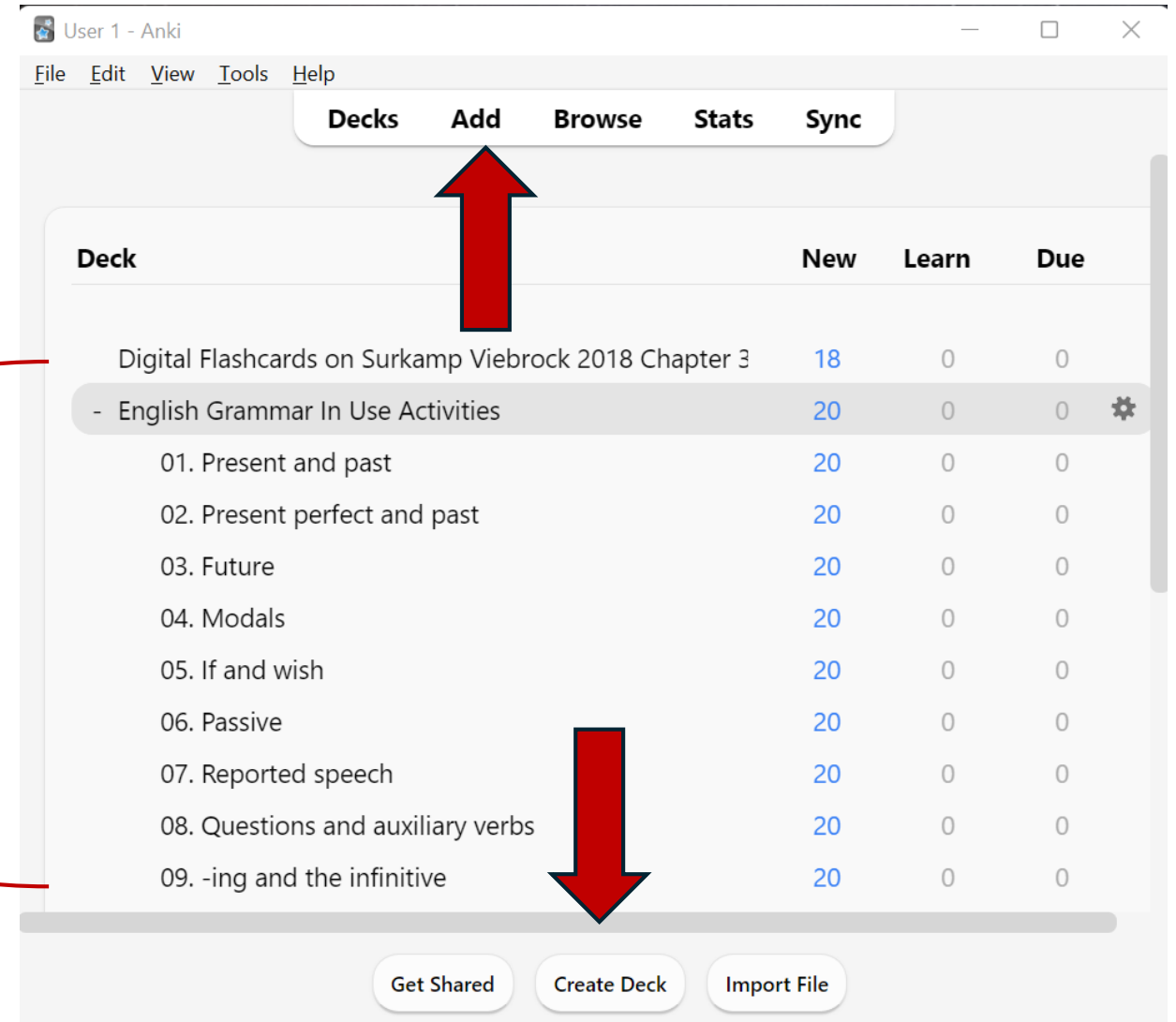
Viebrock (2018), p. 50: What are the three models of teacher education distinguished by Wallace (1991)?



How to create a deck with the Anki Desktop App

1. Click on „Create Deck“.
2. Name your deck. Your new deck will appear in the deck list.
3. Select your new deck and click on „Add“ to add a new card to the deck.

deck list



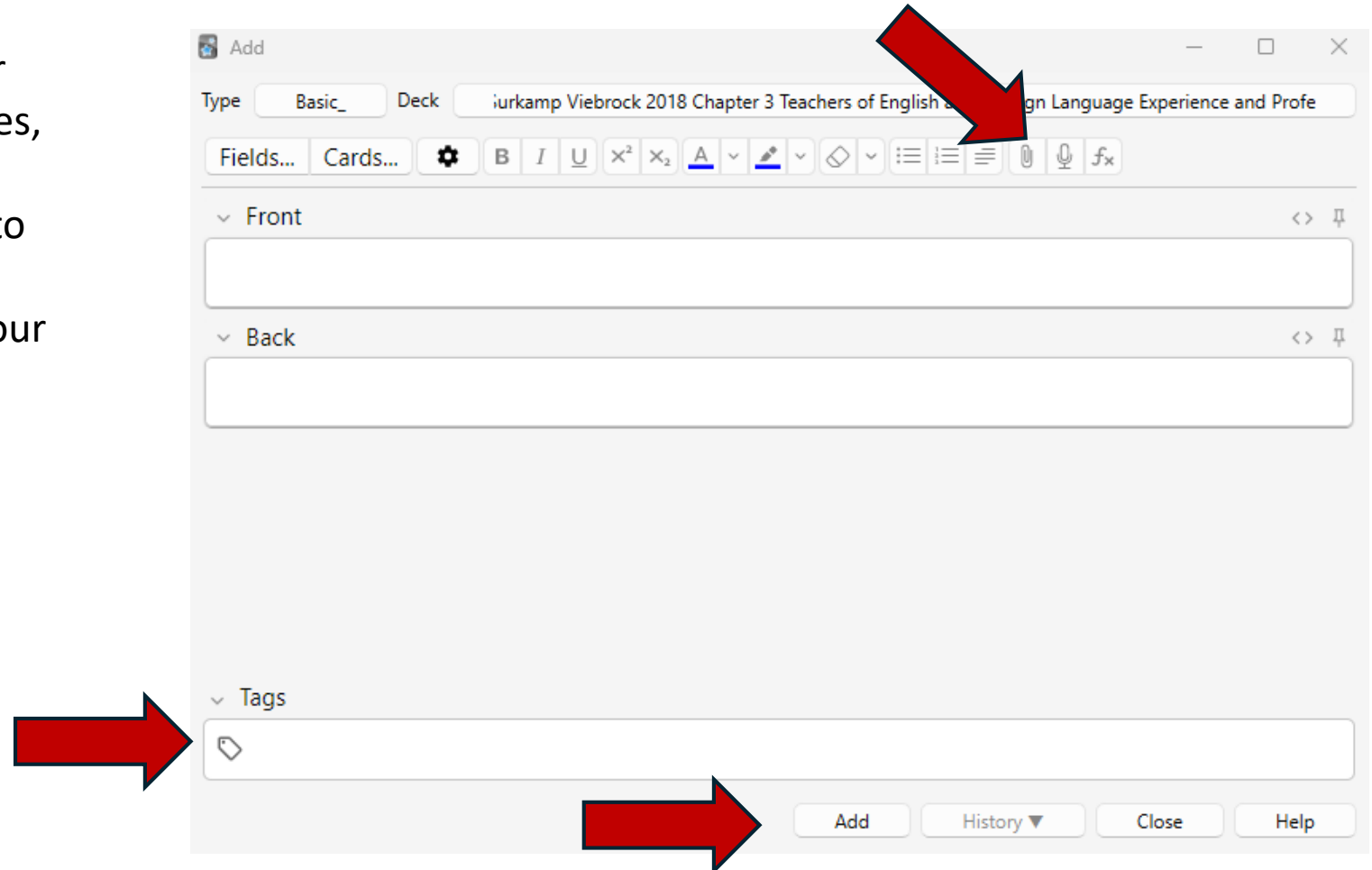
How to create a deck with the Anki Desktop App - continued

4. Enter your question under „front“ and your answer under „back“. You can also add pictures, audios and videos.

5. If you want, you can add tags to your card to make it easier to find and group them.

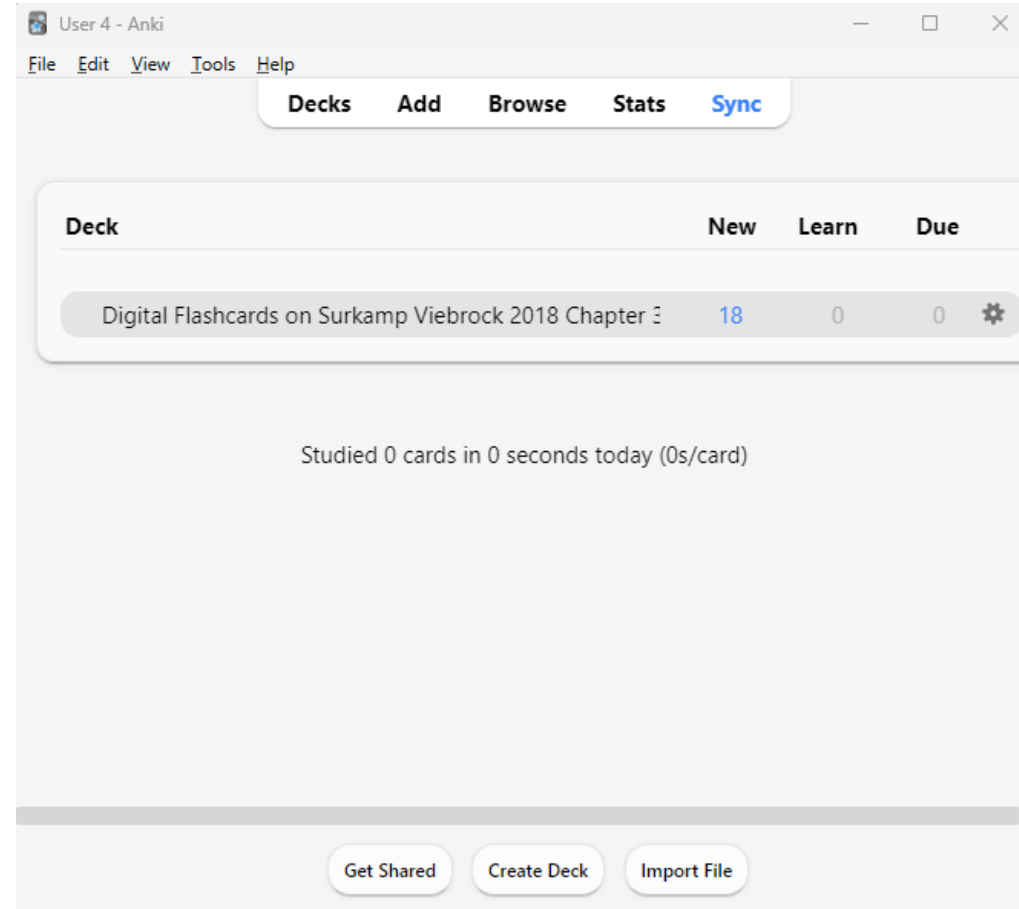
6. Click on „Add“. Your card will be added to your deck.

Add audio etc. to your cards.



How to share a deck you created

1. Click on the small gearwheel symbol next to the deck that you want to share.
2. A new menu will open. Click on „Export“.
3. Save the file on your engine and send it to the person that you want to share it with. When they click on the file, the card deck will automatically be imported into their app and is now ready to be studied.

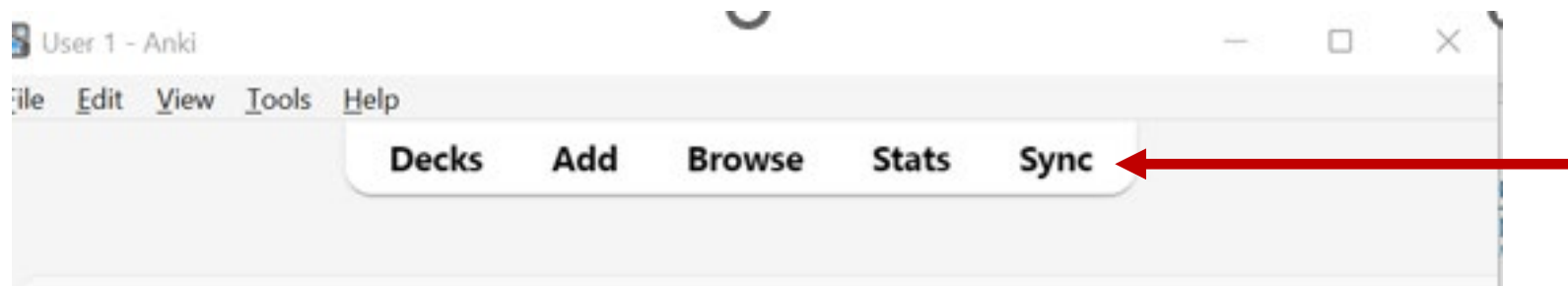


Loophole: How to use Anki on iOS and iPadOS

- **Important Info: Downloading the Anki App is not free for iOS and iPadOS**
 - **But:** You can use the **Web Application** to create and study with card decks.
 - To use all features of Anki (**add pictures**, sounds and videos to your cards, **import and share decks**) you will need to **download the App**, though.
- Therefore, install the Anki App on your home device (MacOS, Windows, Linux). You can easily **upload the decks you created on the Desktop App to your Web Application** to study them on iOS – as will be explained on the next slide.

How to upload a deck from your desktop application to the web application

- Create a web account for: [Anki Web Application](#)
- Open your desktop app. Click on the deck that you want to upload to your web application and then on „Sync“.
- Enter your login data for the web application – you will only be asked to do that once.
- The deck will be uploaded to the web application and can now be used for studying on iOS and iPadOS devices when you open the app in your web browser.

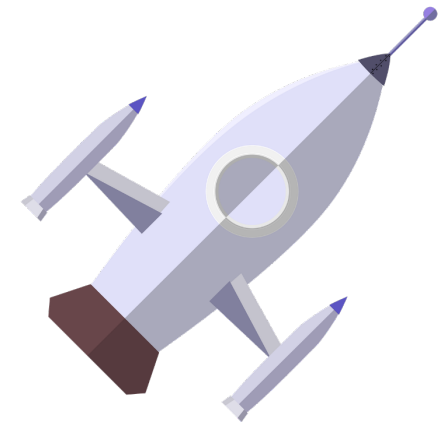


PUTTING THEORY INTO
PRACTICE – MISSION ANKI

Creating Anki Decks of the central seminar contents

Our mission: In your small group, you will create one card deck for the seminar topic of your choice. As we will collect all card decks on a shared platform, you will be rewarded with a **collection of card decks of all important seminar topics.**

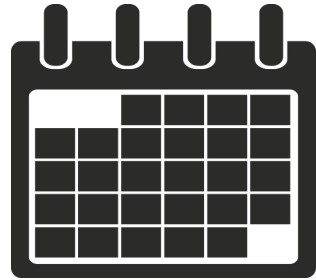
Form groups of 3-4 students. In each small group, there needs to be at least one student who can download the Anki App.



Task: Create one Anki deck

- In your small group, choose one topic from the list provided by your lecturer and write your names and contact info next to it. Exchange contact information with your group members.
- You will create **one deck together** as a group. Your card deck is supposed to consist of **15-20 questions in total**.
- Divide these responsibilities among you:
 - Who prepares questions for which pages/parts in the study material accessible for your topic?
 - Who creates a shared document for collecting the questions and sends the link to all group members?
 - Who checks the questions for which pages for correctness?
 - Who creates the deck out of the questions using the Anki app and uploads the deck to the platform provided to you by your lecturer where all decks are collected?

Deadlines



- Upload your carddeck to the platform specified by your lecturer until date x.
- Give feedback to the carddeck on the topic that is on top of your own one in the platform until date x.
- If your deck is the uppermost on the platform, give feedback on the deck that is the lowermost on the platform. Give feedback in regard to design, content and language. Use the tips for good flashcards as a guideline for your feedback.
- Use the feedback you received for revising your carddeck. Upload the revised version of your carddeck until date x.

REFLECTION

Reflection: Your experience

- Reflect on your experience of **creating and studying** with Anki cards. What did you find helpful/difficult? (regarding content, technical aspects and group work)
- What was your experience learning for the exam using spaced repetition? What would you do differently/what would you do the same next time?
- What do you regard as learning potentials, what as limits of using Anki cards **in the EFL classroom**? How could you support your students in managing difficulties?



Spaced Repetition as a Learning Strategy

- Which role does memorisation play in your particular subject? In which contexts and for which purposes is it important?
- After your Anki experience: How do you regard the potential of spaced repetition for memorising content?
- How can you support your students in making use of learning strategies like spaced repetition?

Reflection: Use your Anki experience for your teaching practice

- Draw on what you already know about the learning/acquisition and assessment of vocabulary. Develop an idea on how AnkiCards could be used for vocabulary learning and/or self-assessment in a year-5 English classroom.*
- Draw on what you already know about the development and assessment of grammar. Develop an idea on how AnkiCards could be used for developing and/or self-assessing grammar in a year-7 English classroom.
- Draw on what you already know about practicing pronunciation. Develop an idea on how AnkiCards could be used for creating an opportunity for practicing/assessing pronunciation in a year-8 English classroom.**
- Bonus question for all groups: Do you know any other apps that could be equally or even better suited for that purpose?

References

- Kim, Su Kyung/Webb, Stuart (2022): The Effects of Spaced Practice on Second Language Learning: A Meta-Analysis. *Language Learning*, pp. 269-319.