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Climbing the Anki Mountain, One (Review) Step at a Time: A Written and Video-Based Guide on Using Anki in Medical School to Enhance Knowledge Acquisition and Retention

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BACKGROUND

- The volume of content in medical education has grown exponentially in recent years (1). To meet the challenges of teaching such measures of material, clinical educators have more recently promoted the use of technology and e-learning (2, 3).

- There is a large body of literature supporting retrieval-based practice and spaced repetition learning as effective methods of enhancing content acquisition and long-term retention (4, 5).

- Anki is a free and versatile flashcard-based program that utilizes a spaced repetition algorithm (6), with a strong community dedicated to incorporating Anki into their medical studies (7).

- However, common criticisms of the Anki platform include a steep learning curve and a lack of guidance on optimal Anki settings and practices. These may present as barriers of entry for medical students.

OBJECTIVES

The purpose of this project is to:

- Explore spaced repetition learning as a study method.

- Develop an entry-level written and video guide on how to use Anki in a medical school setting.

- Evaluate and curate relevant resources to improve understanding and usage of Anki amongst medical students.

DESIGN

- Preproduction: Feedback collected on usage of Anki from cohort of 7 medical students.

- 15,000+ word script written and developed by primary author with testing and input from 5 medical students at varying stages of medical school career.

- Production: 5+ hours of filming and screen recording of Anki walkthrough and advice using OBS Studio© and NVIDIA Broadcast ©.

- Post-production: Editing and audio-mixing completed in Vegas Pro 19.©

DEVELOPMENT AND FINAL RESULTS

		Duration (min)
Section 1	Introduction to Anki and spaced repetition learning	6:18
Section 2	Setting up Anki for the first time	5:00
Section 3	Creating Anki review settings	16:43
Section 4	Essential Anki-add-ons and cards	7:21
Section 5	Basics of using Anki	8:21
Section 6	Using pre-made Anki decks	10:03
Section 7	Using Anki for in-house lectures	7:13
Section 8	Anki review tips and suggestions	8:30
Section 9	Additional Anki add-ons	N/A
Total Duration		1 hr 9 min

Table 1. Anki Tutorial Sections

Image 2. Recording Setup

Image 3. Screen Capture of Video Editing
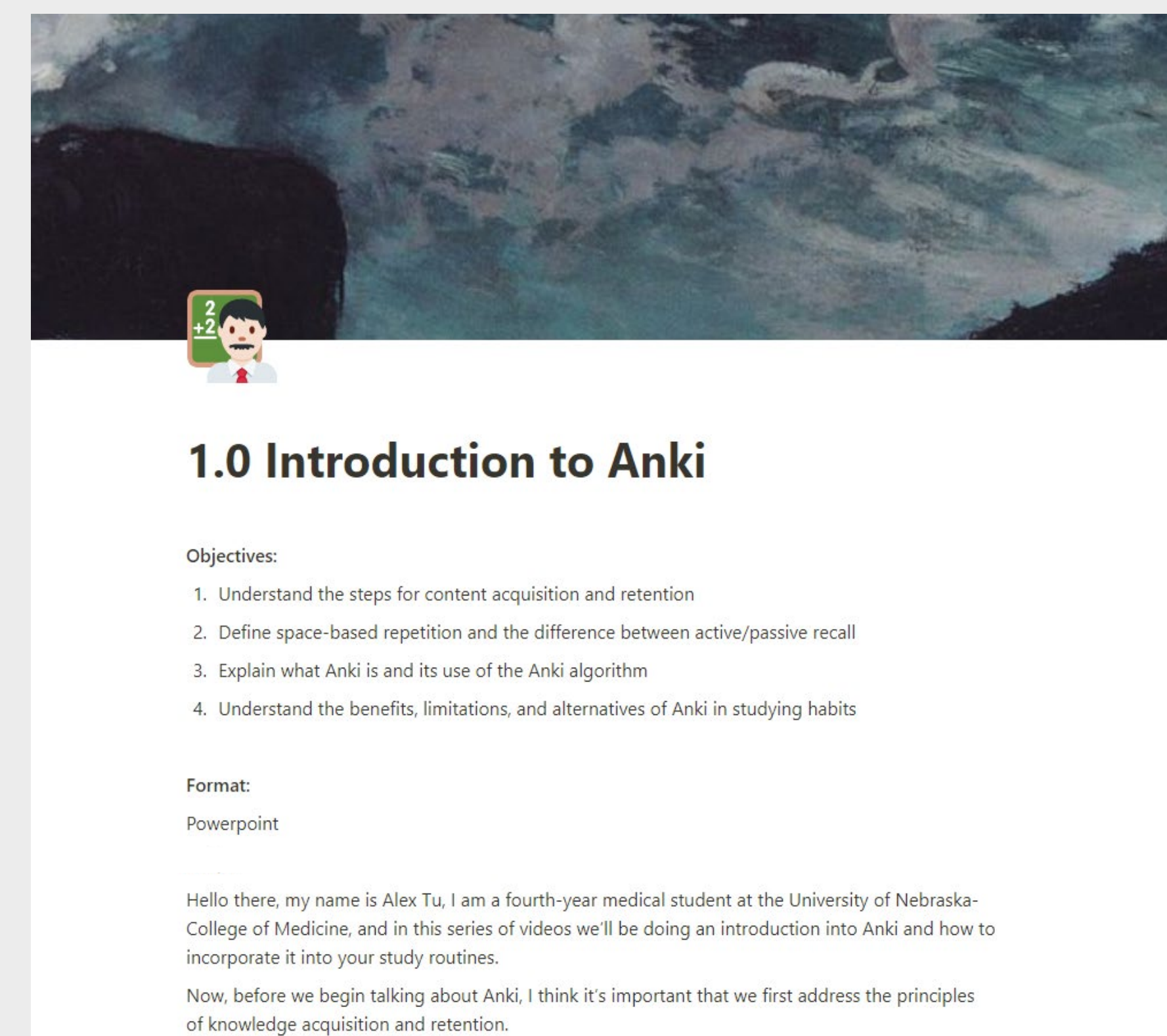
Image 4. Written Guide
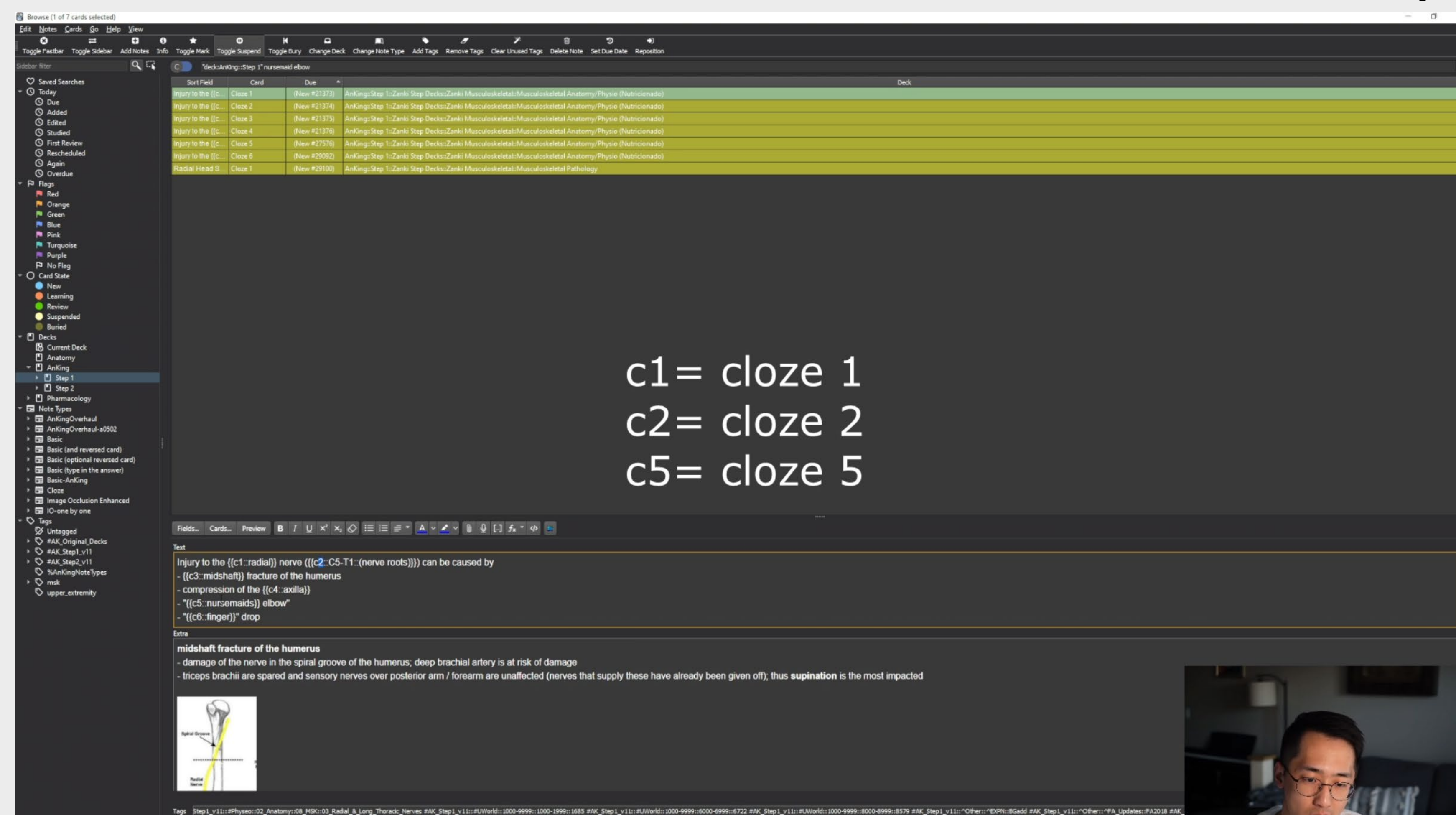

c1= cloze 1
c2= cloze 2
c5= cloze 5

Scan Me!
Image 6. Guide QR Code

Image 5. Screen Capture of Final Rendered Product

IMPACT

- These written and video guides offer improved direction and accessibility in using Anki as a study tool for future generations of UNMC medical students.

- Reducing Anki's learning curve provides students the potential to enhance their studying strategy and content retention, thereby potentially increasing time for wellness and reducing burnout.

- Built-in performance and analytics tools can be used to actively adapt studying strategies for optimal knowledge acquisition and memory.

- Though these guides have been written in the context of medical school, their benefits may still be applicable to other graduate programs.

FUTURE DIRECTIONS

- Qualitative and quantitative studies can be conducted to measure the impact these guides have on student academic performances.

- Educators can invest in incorporating Anki into their content to streamline transfer of knowledge, and potentially increase time for synthesis activities (ex. CBL, PBL, etc).

- There are additional opportunities for educators to compare performance of non-Anki users and previous classes.

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