From Tacit Knowledge to Literate Practice

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Introduction

Overview of Al's growing role in education:

• Al is increasingly being integrated into educational practices, enhancing learning experiences and outcomes.

Importance of AI literacy and pedagogical literacy:

 Educators need to develop both Al literacy to effectively use these tools and pedagogical literacy to integrate them into their teaching practices.



Recognizing Needs for Clear Language

Educators start recognizing the need for clearer, more specific language to improve AI responses. The process is iterative.

"Create an exercise material on sentence elements and main clause/subordinate clause. The sentence elements I want to include are subject, predicate, direct object, indirect object, predicative complement, adverbial, and attribute. I would like you to make an exercise for each sentence element first, then an exercise where you work with all the sentence elements simultaneously. After that, an exercise to identify main clauses and subordinate clauses, and finally an exercise where you identify which sentence element the subordinate clause constitutes."

"Can you make five exercise examples for each part instead of two? And make sure that the predicative complement follows the words 'vara' (to be), 'bliva' (to become), 'heta' (to be called), 'kallas' (to be called) and their different forms?"

Linguistic Precision in Al Interactions

Experimentation with natural language prompts:

• Educators initially use everyday language to interact with AI tools, exploring their capabilities.

Recognizing the need for precise language:

• To get accurate and relevant responses, educators learn the importance of using precise language in their prompts.



Claude can make mistakes. Please double-check responses.

Deep-Dive into Individual Concepts # **START WITH A SINGLE CONCEPT, ONE CONCEPT AT TIME** EXECUTE FOLLOWING BY AN ADVANCED ANALYSIS

1.1 **Misconception Identification:**

- Identify **misconceptions related to the concept, especially those influenced by the textbook's presentation.

1.2 **Closely Related Concepts**: Differentiate and apply knowledge accurately.

1.3 **Common Knowledge Misapplications**: Address incorrect applications of general knowledge.

Claude 3 Opus 🗸

Use shift + return for new line

Generative Al Literacy

Examples of initial quizzes and iterative refinement:

 Refining AI-generated quizzes by improving prompt precision, leading to better outcomes.

Learning concepts like "plausibility" and "distractors":

 Through refining prompts, educators discover important concepts for creating effective quizzes.

💮 QUIZ 3.0

Based on the information provided in the "Laromedel.txt" document regarding monosaccharides, disaccharides, and polysaccharides, and aligning this with the Swedish Biologi 2 course grading criteria (E, C, A), here is a table with quiz questions designed to test comprehension, application, and analysis levels of these concepts.

Frågenummer	Begrepp	Svårighetsgrad	Fråga	Svarsoption	Korrekthet	
1	Monosackarider	E	Vilket av följande är ett exempel på en monosackarid?	Glukos	1	ę
2	Disackarider	E	Vilka två monosackarider bildar laktos?	Glukos och fruktos	0	({
3	Polysackarider	Е•	Vilken funktion har cellulosa i växter?	Energilagring	0	٤

Dialogue with AI (Vera)

Al as a colleague:

 Engaging in conversations with AI tools like Vera to refine pedagogical literacy.

Examples of dialogues improving literacy:

 Dialogues with "Vera" help to clarify and develop pedagogical ideas since the AI can ask questions, make conclusions and suggest new theoretical perspectives from the conversation. VERA - Biologi: Teacher practice, planing, analyse ~

You Hej

VERA - Biologi: Teacher practice, planing, analyse Hej! Hur kan jag hjälpa dig idag?

You

ja jag funderar på hur jag ska lägga upp provet på torsdag. Jag har arbetat vidare med QUIZ frågorna, men eleverna tyekte ju inte om att de var genererade av AI. Kan du rekapitulera vad eleverna sa efter lektionen i torsdags?

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VERA - Biologi: Teacher practice, planing, analyse

Efter lektionen i torsdags uttryckte eleverna en blandad återkoppling gällande användningen av Al-genererade frågor och andra aspekter av lektionen. Här är en sammanfattning av deras feedback:

Positiva Aspekter

- Uppskattning av Ytterligare Material: Eleverna uppskattade när du introducerade material och begrepp utöver det grundläggande läromedlet, vilket tyder på att de värderar berikad undervisning som stimulerar deras intresse och engagemang.
- Fördjupade Förklaringar och Frågestunder: Möjligheten att få djupare förklaringar och ställa frågor värderades högt, vilket bidrar till en mer interaktiv och engagerande lärmiljö.

Områden för Förbättring

• Tidesllakaring ner Slide: Eleverne önskade mer tid för ett enteckne, reflektere och

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Message VERA - Biologi: Teacher practice, planing, analyse...

Meta-Perspective

Developing meta-perspective:

• The development of a metaperspective on teachers practice is interconnected with the refining of professional language.

Broader reflections and strategic thinking:

 Meta-perspective develops broader reflections on pedagogical strategies and the outcomes of AI-generated material.



Teachers as practitioners becoming more theoretical orientated

- Teaching includes many practic elements. Theories behind the pedagogical ideas are seldom in focus when planning, implementing and assessing even if they are in the background.
- Interacting with AI forces teachers to consider their theoretical framework and can also suggest or lead to new theoretical perspectives
- Engaging with theoretical concepts and frameworks enhances professional development.

Conclusions

Linguistic Precision:

• Refining professional language is essential for effective AI interactions and broader pedagogical reflections.

Meta-Perspective:

• Developing a meta-perspective is crucial for integrating strategic thinking into everyday educational practices.

Theoretical Professional Development:

 Engaging with theoretical concepts and frameworks enhances professional development and improves teaching practices.

Thank you!

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Custom GPTs: <u>https://chatgpt.com/g/g-3RBJxzYB1-</u> content-generation-from-syllabus-and-n-c-coseaq-c

Github: https://github.com/tikankika