

An application of Kolb's experiential learning theory to teaching AI scribe technology to healthcare practitioners

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Background

Ontario is currently facing a primary care crisis, with an estimated 2.5 million Ontarians without access to a family physician as of mid-2024 (1).

This is a multifactorial issue, but one driving factor behind existing family MDs resignations and poor new MD recruitment is burnout related to the significant administrative burden associated with clinical documentation (2).

One proposed solution for reducing time spent by primary care providers is the utilization of AI scribe technology (3).

Problem

While utilization of AI scribe technology in a provider's clinical practice may be self-directed, evidence suggests that as many as one-third of providers feel as though further educational support would be useful in its implementation (4).

Objectives

To relate Kolb's Experiential Learning Theory to educational challenges associated with teaching AI scribe tools in primary healthcare settings:

- to *recognize* how preferential learning styles may be utilized to orient learners to entry into Kolb's cycle,
- to *distinguish* possible challenges precluding adult learners' adoption of AI scribe technology, and finally
- to *identify* how these challenges may be mitigated by addressing them at each of the stages of Kolb's cycle.

Theory & Application



Concrete Experiencers

| Challenges | Solutions |
|--|---|
| HCPs may feel overwhelmed by integrating AI scribes into their workflows due to lack of hands-on experience. | <ul style="list-style-type: none">Provide hands-on AI simulationsUse real-world clinical scenarios |

Active Experimenters



| Challenges | Solutions |
|--|---|
| HCPs may feel unprepared to implement AI scribes in clinical settings or adjust their workflows. | <ul style="list-style-type: none">Encourage daily AI scribe usePilot programs with user feedbackAdvanced training |



Reflective Observers

| Challenges | Solutions |
|---|--|
| HCPs may not fully grasp how AI scribes improve their practice or might misunderstand their capabilities / limitations. | <ul style="list-style-type: none">Facilitate group discussions & debriefsAnalyze AI scribe case studies |

Abstract Conceptualizers



| Challenges | Solutions |
|--|--|
| HCPs may struggle to connect their experiences with the theoretical understanding of how AI scribes function and their role in healthcare. | <ul style="list-style-type: none">Teach AI principles & ethicsUse educational tools for EHR integrationHighlight AI benefits in practice |

Discussion



ELT can be interactive & engaging
Cyclical nature can allow for iterative refinement for training delivery



Resource-intensive
ELT's application is dependent on skilled facilitators
Small group/individualized learning may make scaling difficult



Feedback from reflective learners in Kolb's cycle can allow for continuous improvement
Can enhance buy-in and reduce resistance to AI scribe uptake through experiential and reflective dimensions of ELT



Rapid changes in technology may require continuous revisions to AI scribe training
Provider resistance to AI's role in healthcare may result in disengagement and undermine ELT effectiveness

Conclusion

Kolb's experiential learning theory provides a practical framework for understanding how adults learn. Its application to the challenges faced by HCPs looking to adopt AI scribe technology in the clinical setting can provide a framework for identification of challenges faced by learners.

References and Acknowledgements

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