

Adult Learning Across Healthcare Disciplines:

Fostering Infection Prevention Engagement

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What to expect from today



Introduce Adult Learning
Principles and their
benefits



Introduce different
learning styles, how to
apply them



Identify strategies to
foster retention and
engagement

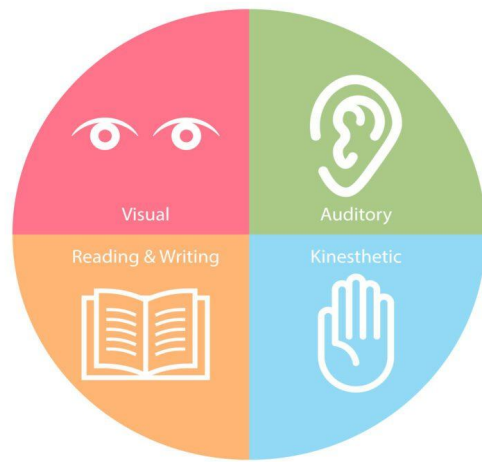


Apply two (2) strategies
to develop engaging
education & training

What challenges do you face engaging adult learners?



How do you prefer to learn?
(You may choose more than one)



WHY is Education Important?

LIFELONG LEARNING

Personal Development

Economic Opportunity

Social Empowerment

Health & Well-Being

Global Impact

Adapting to
Technological Change

Reduces Inequality



What are Adult Learning Principles?

Self-directed

Experiential

Tied to
background
knowledge

Relevant

Problem-
centered

Collaborative

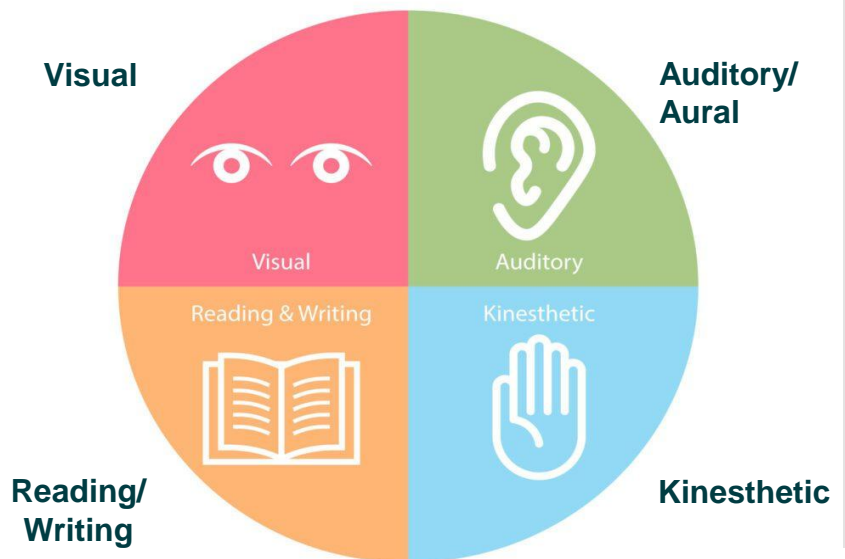
Benefits & Importance



- Enhances Retention & Engagement
- Promotes Critical Thinking and Problem Solving
- Supports Motivation Through Autonomy
- Encourages Reflection and Application
- Increases the Relevance of Training
- Promotes Long-term Behavior Change
- Fosters Collaborative Learning

Learning Styles VARK

Neil D. Fleming 1987



66% of learners are multimodal

20.1% have bimodal preferences

VARK Research:
<https://vark-learn.com/research-statistics/>



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Content for Visual Learners?



- Infographics
- Charts and Graphs
- Diagrams and Flowcharts
- Videos, Animations, and Interactive Tools
- Photo Galleries and Illustrations



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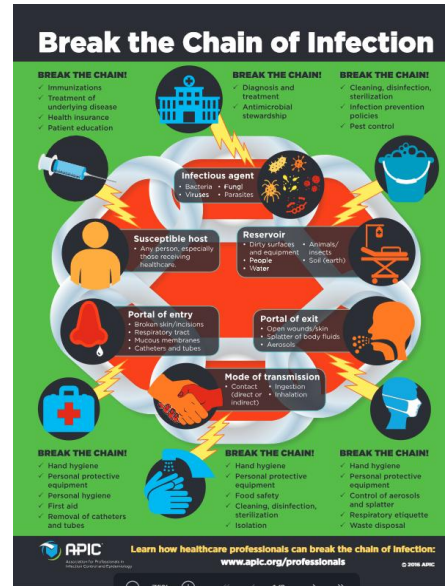
Infographics



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Infographics



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Charts & Graphs



Does the Table Tell The Story?

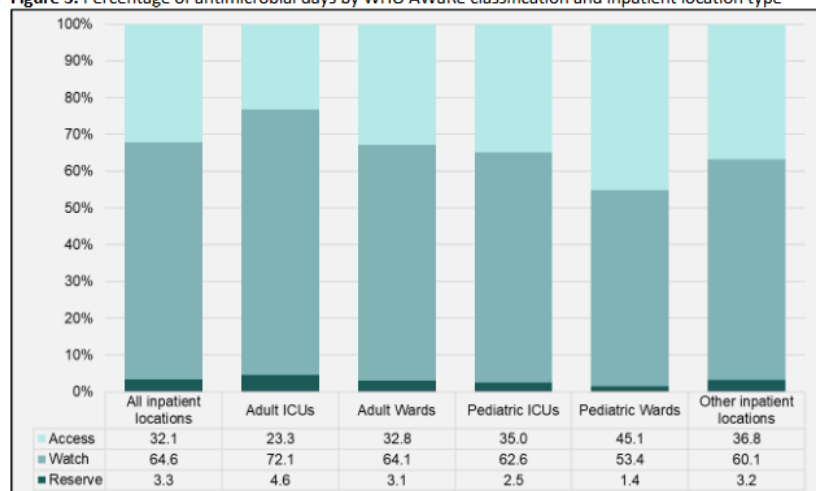
Table 6. Antimicrobial usage by WHO AWaRe classification and location type

| Location Type ^a | WHO AWaRe Classification | | |
|----------------------------|---------------------------|--------------------------|----------------------------|
| | Access Antimicrobial Days | Watch Antimicrobial Days | Reserve Antimicrobial Days |
| All locations | 22,584,921 | 45,468,675 | 2,329,245 |
| Adult ICUs | 2,911,751 | 9,006,321 | 569,045 |
| Adult Wards | 14,654,484 | 28,582,865 | 1,374,403 |
| Pediatric ICUs | 277,711 | 497,007 | 19,632 |
| Pediatric Wards | 805,050 | 953,808 | 25,642 |
| Other locations | 3,935,925 | 6,428,674 | 340,523 |

Does the Table tell the Story?

Does the Bar Graph Tell You More?

Figure 3. Percentage of antimicrobial days by WHO AWaRe classification and inpatient location type



Diagrams & Flowcharts



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Don't feel stuck after a sharps, needlestick, or splash injury.

ACT QUICKLY!



PREVENT INJURIES AND SPLASHES.

Employers: Have PPE available.

Staff: Spare a second to wear PPE and wear it properly.
Use devices with sharps injury protection features.
One needle. One syringe. One time.



CLEAN IMMEDIATELY.

Skin: Wash affected area thoroughly with running water.

Do not apply bleach or iodine. Do not squeeze or rub area.

Eyes, nose, mouth: Flush well with water or saline.

Do not use soap, antiseptics, or disinfectants.



REPORT EXPOSURES TO AN EMPLOYER. Follow post-exposure processes. On-the-job exposures often require formal follow-up procedures. Don't delay next steps—report promptly to employer (direct supervisors, managers).



SEEK PROMPT TREATMENT. Discuss the situation leading to the injury so healthcare providers can assess risk of infection and treat accordingly.



REVIEW THE INCIDENT WITH YOUR EMPLOYER. Review what happened to help reduce the risk in the future. Determine how the procedure could be improved, and evaluate different products for safer alternatives.

APIC
Association for Professionals in
Infection Control and Epidemiology

APIC 2024

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Illustrations & Photo Galleries



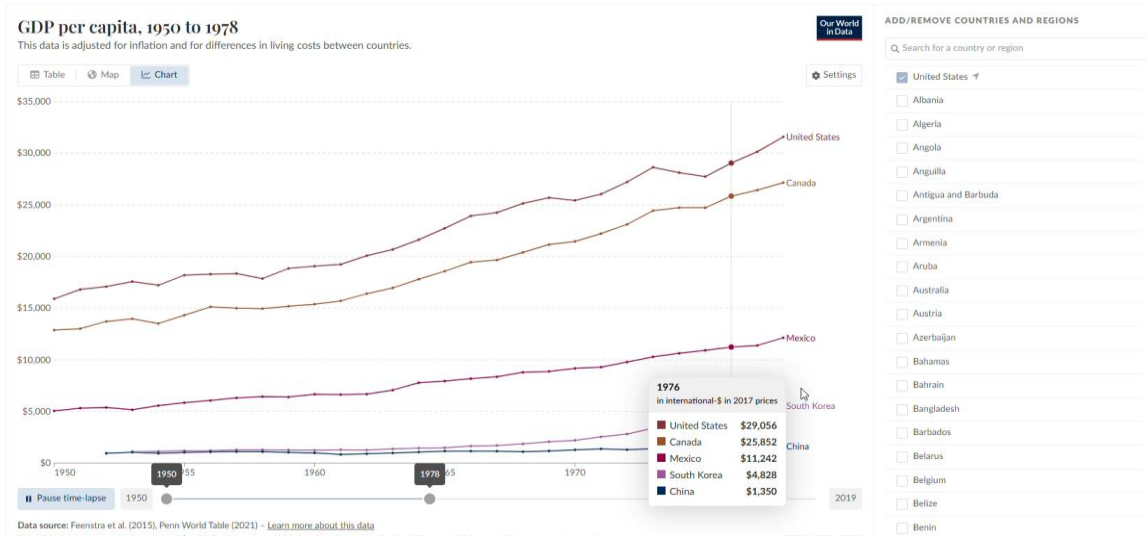
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Videos, Animations, and Interactive Visual Tools



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Content
for
Auditory
Learners



Listening

Talking

Discussing



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Content for Auditory Learners



Listening

Often

an instructor's default

Effective

when combined with note-taking for Reading/Writing or Visual Learners

Consider

listing Podcast resources for follow-up.



Content for Auditory Learners



Talking

Memorable and repeatable

Acronyms

Memes for Audiovisual learners



Content for Auditory Learners



Discussing

- Questioning
- Responding
- Debating
- Rephrasing



Content for Reading and Writing

Reading and writing were the forgotten Rs in the Neurolingistic Acquisition Model (VAK)-- a model based on varying from the modes education already relied on.

Sometimes we are so eager to embrace the new, that we leave off something old and valuable. VARK restored reading and writing—to place in education but did not give it primacy over other modalities.



Content for Reading & Writing



Reading and Writing Activities

Handouts, Links

Note-taking

Reflection Responses

Journaling

Open-ended questions

Survey questions



Content for Kinesthetic Learners



Incremental

I Do
We Do
You Do



Content for Kinesthetic Learners



Incorporates
Demonstration,
Check-Backs,
and Feedback

Kinesthetic components aren't just for kinesthetic content!



Kinesthetic strategies

Assist with visualization, sustainability of action, and retention.

May incorporate tools or props, but don't rely on them unless they are essential to a procedure being taught.



Barriers to Success



Information Overload

Time Constraints

Burnout & Fatigue

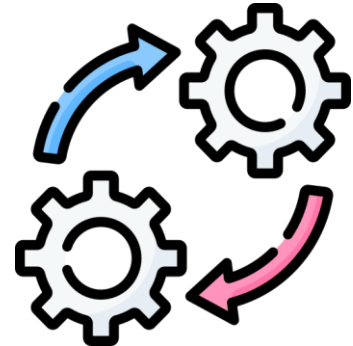
Perceived Irrelevance or Routine

Resistance to Change or New Protocols

Inconsistent or Poor Training Delivery

How Do We Tie in the right Learning Styles For Our Entire Audience?

1. **Know** Your Audience's Goals
2. **Set** Clear Objectives
3. **Adopt** Multimodal Teaching Methods
4. **Blend** Learning Strategies
5. **Assess & Adjust:** Incorporate Feedback Loops
6. **Leverage Technology**—Don't let technology leverage you!



[Thinkific](#)
[Tulane University](#)
[Teachable](#)

Fostering retention & engagement--

CONTENT SHOULD BE

- Relevant
- Incremental
- Multimodal
- Self-directed
- Flexible
- Collaborative
- Sustainable

DON'T BE IRRELEPHANT!



Fostering retention & engagement

EDUCATORS SHOULD

- Foster psychologically safe environment
- Listen actively
- Acknowledge prior experience
- Provide immediate feedback
- Allow time to reflect
- Create opportunities to collaborate



Education Plan Template

| Education Plan Template | | | |
|-------------------------|-------------------------|-----------------------------|------------------|
| Title: | | | |
| Description: | | | |
| Objectives: | | | |
| Time | Workshop Topic/Activity | Description/Modalities/VARK | Materials Needed |
| | Intro | | |
| | | V A R K | |
| | | V A R K | |
| | | V A R K | |
| | Closing | | |

Your Turn!

Develop your Education Plan



Case Outbreak



Hand Hygiene Campaign



Your Own Training

Debrief

Learning Styles Applied
At Least two (2) Strategies
What went well?
What were your opportunities?



Introduced Adult Learning Principles, why important and benefits

Introduced the VARK learning styles and barriers to retention & engagement

Identified strategies to foster retention and engagement

Applied and least two (2) strategies to develop engaging education & training

Do You Want To Know More About Adult Learning?

Teaching Excellence in Adult Literacy (TEAL) [Fact Sheet #11: Adult Learning Principles](#)

VARK Learning Styles:

Questionnaires and [Strategies](#) for [Learners](#) and [Educators](#), including strategies for each modality in multiple languages.

The Learning and Development Podcast, Episode 98 [Learning and Development with Dr. Carrie O. Graham](#) (39 min listen)

References

- Baumgartner, L. M., & Carr-Chellman, D. (2024, Dec 17). Adult Learning: A Multifaceted Endeavor. *New Directions for Adult and Continuing Education*, 2024(184), 5. WILEY. 10.1002
- Coley, M. A. (2008, August). *Professional Development Fact Sheet #5: Adult Learning Theories* (P. Esra, Ed.). Yumpu.com. Retrieved Mar 20, 2025, from <https://www.yumpu.com/en/document/read/48297660/adult-learning-theories-calpro>
- Fleming, N. D., & Mills, C. (1992). Not Another Inventory, Rather a Catalyst for Reflecting. *To Improve the Academy*, 11, 7. chrome-extension://dbkidnlfkinanneifjjofockpcogcl/pdf-viewer.html?file=https%3A%2F%2Fvark-learn.com%2Fwp-content%2Fuploads%2F2014%2F08%2Fnot_another_inventory.pdf
- Knowles, M., Holton III, E. F., Caraccioli, C., & Robinson, P. A. (2025). *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (10th ed.). Routledge.
- Knowles, M. S. (1984). *Andragogy in Action: Applying Modern Principles of Adult Learning*. Wiley.
- McGrath, D.-L. (2007, July). Implementing an Holistic Approach in Vocational Education and Training. *Australian Journal of Adult Learning*, 47(2), 17. ERIC.
- TEAL Center staff. (2011). *TEAL Center Fact Sheet #11: Adult Learning Theories*. American Institute for Research: Teacher Excellence in Adult Literacy (TEAL). Retrieved March 27, 2025, from https://lincs.ed.gov/sites/default/files/11_%20TEAL_Adult_Learning_Theory.pdf

*Thank
You!*

Your
Feedback is
Important

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