**Engaging Learning through Polling: When and How to Use Them**

Our brains are wired to seek novelty and challenge. When we encounter something unexpected or are asked to solve a problem, our brain’s reward system is activated, releasing dopamine, which enhances our focus and motivation. Polling questions tap into this mechanism by introducing an element of interactivity and challenge, making the learning experience more engaging and memorable.

When to use them depends on what you want to use the questions for. For the different types of online polling options, please refer to the [Polling – Different Types of Polls](https://cchmc.cloud-cme.com/contact/?p=35) document

1. **At the Beginning:** Creating Cognitive Dissonance

* **Why**: Starting with a polling question that challenges a common belief or misconception can create cognitive dissonance. This technique engages your audience by making them question their assumptions, which primes their brains to be more receptive to new information.
* **Benefit**: This approach sparks curiosity and prepares the audience to absorb and rethink the information you will present.
* **Anxiety and Resistance**: Cognitive dissonance can induce anxiety or resistance, particularly if the question challenges deeply held beliefs. This emotional response can distract from the learning process.

2. **Throughout:** Continuous Engagement

* **Why**: Regularly integrating polling questions maintains a high level of interaction, breaks up the content, and encourages participation. This approach makes your presentation more dynamic and responsive to the audience’s needs.
* **Benefit**: Continuous engagement helps sustain attention and prevents cognitive overload.
* **Disruption**: Some presenters may find it challenging to interrupt their train of thought to conduct a poll and then seamlessly continue with their presentation. This can disrupt their delivery and affect the overall coherence of the presentation.

3. **At the End:** Conducting a Knowledge Check

* **Why**: Conducting a knowledge check at the end helps assess how well the audience has grasped the key points. This is your opportunity to reinforce learning and provide feedback on the effectiveness of your presentation.
* **Benefit**: The act of recalling information strengthens neural connections, aiding long-term retention.
* **Limited Time for Clarification**: If significant misunderstandings are revealed, there might not be enough time to address them adequately, leaving the audience with unresolved questions.

**Preparing for Follow-Up**

* **Immediate Feedback:** Be prepared to address any misconceptions or questions that arise from the polling results. Immediate feedback is crucial for clarifying misunderstandings.
* **Further Discussion:** Use the results to guide deeper discussions or provide additional explanations as needed. This ensures that your audience leaves with a clear understanding of the material.

More information:

* Columbia Center for Teaching and Learning. (2020). Developing poll questions to engage and assess student thinking in science and engineering courses. Columbia University. Retrieved from <https://ctl.columbia.edu/resources-and-technology/resources/poll-questions-stem/>
* Curriculum Solutions. (2021, November 1). *Leveraging cognitive dissonance*. Curriculum Solutions. <https://curriculumsolutions.net/blog/2021/11/01/leveraging-cognitive-dissonance/>
* McGivern, P., & Coxon, M. (2015). Student polling software: Where cognitive psychology meets educational practice? Frontiers in Psychology, 6, 55. <https://doi.org/10.3389/fpsyg.2015.00055>
* Price, T. J. (2022). Real-time polling to help corral university-learners’ wandering minds. Journal of Research in Innovative Teaching & Learning, 15(1), 98-109. <https://doi.org/10.1108/JRIT-03-2020-0017>
* Smith, C. Step-by-step guide for conducting a knowledge check effectively. Neovation. <https://www.neovation.com/learn/85-guide-for-conducting-knowledge-check-effectively>