**Let’s Design PowerPoint Presentations for Students’ Learning Styles!**

**Abstract**

Every one of us has unconscious biases. As teachers, we may unknowingly be influenced by our unconscious biases in the classroom. We often teach students the way we like to be taught, believing this is most effective for them, when Myers-Briggs Type Indicator research suggests students are predominantly sensing whereas professors are predominantly intuitive. In this session we will provide PowerPoint presentation tips for designing lectures to mitigate such difference. Participants are encouraged to bring a PowerPoint presentation about a topic they find difficult to teach. The participants will redesign their presentations during a small group exercise.

Keywords: Teacher bias; learning styles; PowerPoint presentation tips

**Introduction**

Professors experience difficulties in understanding why students fail to comprehend course materials, and sometimes attribute the causes of the failure to students (Georgiou et al., 2002; Rickman & Hollowell, 1981; Tollefson & Chen, 1988; Weiner, 1979). However, some professors may unknowingly design lectures that students find challenging to comprehend, not being unaware that professors and students learn differently (Brightman, 2019; Myers & McCaulley, 1985). For example, when professors present a concept or a topic starting with theory, it may be more difficult for students to understand it than when professors start with an application of a theory using concrete examples or mini cases before going into the theory. This example is not to suggest that theory is not important, but to highlight that in designing lectures professors are advised to defeat the bias that students learn the same way as professors do.

Myers-Briggs Type Indicator (MBTI) research suggests that while business students are predominantly sensing, business professors are predominantly intuitive (Myers & McCaully, 1985). For example, professors who tend to be intuitive and big-picture thinkers are prone to start a lecture with a theory and then introduce an application of the theory. However, sensing students who are naturally drawn to details may find such a lecture challenging to understand and not retain it well.

In the paragraphs that follow, we contrast a typical Myers-Brigg Type profile of students with that of professors in greater detail. Noting that in designing lectures professors may benefit from comprehending how their students learn, we then propose a 60-minute session where we will provide PowerPoint presentation tips to help session participants design lectures that sensing students can comprehend and retain well. The session also includes a small group exercise that allows the participants to bring a copy of a PowerPoint presentation about a topic that they find difficult to teach. During the exercise the participants will be given time to discuss and revise their PowerPoint presentations.

**Theoretical Foundation & Teaching Implications**

The Myers-Briggs Type Indicator (MBTI) is considered as one of the most reliable methods for assessing student learning styles. The MBTI provides 16 learning styles (Myers & McCaulley, 1985; Myers & Myers, 2010). The most common MBTI style for business undergraduates is the Extraverted-Sensing-Thinking-Judging (ESTJ). Details of the ESTJ learning style are presented below.

* *Extraverted* students are action-oriented, finding energy in interacting with things and people surrounding them.
* *Sensing* students are detail oriented, want facts, and trust them.
* *Thinking* students make decisions based on analysis, logic, and objective criteria
* *Judging* students only want to know the essentials, and take action rather quickly

In contrast, the most common MBTI style for business professors is the Introvert-Intuitive-Thinking-Judging (IITJ). Details of the IITJ learning style are presented below.

* *Introvert* professors are reflective thinkers, finding energy in the inner world of ideas, concepts, and abstractions.
* *Intuitive* professors look for the “big picture,” seeking out patterns and relationships among the facts they have gathered.
* *Thinking* professors make decisions based on analysis, logic, and objective criteria
* *Judging* professors take action quickly, and only want to know the essentials

As discussed above, while professors tend to be intuitive, the majority of business students are sensing. In designing lectures sensing students can retain well, business professors are advised to take caution, in particular when the instructor's presentation clarity is one of the most important factors in student ratings of instruction (Feldman, 1989).

**Learning Objectives**

Upon completion of the session, session participants will be able to:

* Articulate why business professors and students learn differently.
* Illustrate examples of learning styles differences between business professors and students
* Evaluate how not knowing such differences negatively impacts student learning.
* Redesign a PowerPoint presentation about a topic they find difficult to teach students

**Activity Overview**

The session consists of five parts and is not expected to exceed 60 minutes (see Table 1). We will first provide an overview of the session and have session participants discuss why designing PowerPoint presentations is challenging. Then we will introduce a couple of bad and good PowerPoint presentation examples and offer PowerPoint presentation tips to the participants. Immediately after this we will facilitate a small group exercise. For this exercise the participants can bring a copy of a PowerPoint presentation (electronic or hard) about a topic that they find difficult to teach students. If a participant does not bring a PowerPoint presentation to the exercise, she or he will be provided the opportunity to help others with their redesign. The participants will be given time to interact with other participants to discuss and revise their presentations based on their notes. Although numerous resources offering PowerPoint presentation tips (e.g., Davis, 1993; Reynolds, 2011) are available, for the purpose of our session we will focus on the following tips:

* *Start with explaining why the topic is important before going to the topic so that students understand the topic’s practical value*. Let’s take Porter’s Five Forces analysis for example. Before giving a lecture on the conditions under the bargaining power of suppliers, the bargaining power of buyers, the bargaining power of substitutes, the threat of new entrants, and the competitive rivalry increase or decrease, make sure you tell students that they can use this analysis to evaluate an industry’s attractiveness and profitability.
* *Start with a material familiar to students or a simple version of the material to increase students’ expectancy of success.* Let’s continue with the Porter’s Five Forces analysis example. When picking industries to walk students through the analysis, consider industries such as the fast food restaurant industry and smartphone industry that most students are familiar with because they consume these industries’ products, rather than using unfamiliar industries such as the plastic injection molding industry.
* *Start not with theory but with an application of theory (concrete example, mini-case) to promote problem-based learning*. Students are more interested in learning how to apply theory to real-world business problems but are less interested in knowing theory itself. Going back to the Porter’s Five Forces analysis example, students are more likely to respond to business case studies where they can solve problems using the analysis than to a lecture on theoretical foundations of Porter’s Five Forces analysis. Thus, make sure to start with an application of a theory and then explain the theory in detail
* *Allow students to explain the connection they forge between the example and the theory*. Set aside enough time for students to make the connection between the example and the theory on their own or as a group, instead of spoon-feeding to the students the connection you are making between the example and the theory.
* *Give a summary and do a 2-minute reflection note.* Summarize key points and have students write their takeaways so that they can better retain the key points

After the exercise is complete, we will invite the participants to share their work and end the session with key take-aways, feedback, and additional insights. At the end of the session a one-pager summarizing the session and the PowerPoint presentation tips will be distributed to the participants.

**Session Description**

Table 1. Session Activities and Estimated Time

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| --- | --- |
| Description of Time Block of Session | Estimated Time |
| **Presenters:**  We provide an overview of the session | 5 mins |
| **All Session Participants**:  We facilitate discussion on challenges participants are experiencing  in designing to presenting lectures using Power Point slides | 5 mins |
| **Presenters:**  We introduce a bad power point presentation example and then suggest tips to improve presentation clarity | 15 mins |
| **Small Group Exercise:**  Groups of 3-4 participants get together to create an improved power point presentation | 15 mins |
| **Share-out**:  We invite teams to share their work and facilitate discussion among session participants | 10 mins |
| **Presenters**:  We wrap up the session with key take-aways, questions, feedback, and additional insights from participants. | 10 mins |
| **Estimated Full Session Time** | **60 minutes** |

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