THE WALL STREET JOURNAL.

# How-To Guide

Teaching Higher-Order Thinking Skills Online

## Introduction

The unrivaled coverage of The Wall Street Journal is available anytime, anywhere on WSJ.com and WSJ mobile and tablet apps. See how Raúl Sánchez and Dan Bullock, Professors at New York University School of Professional Studies, use the Journal to keep class discussions moving in the digital world.

# Teaching Higher-Order Thinking Skills with WSJ Virtually

Professor Sánchez and Professor Bullock teach higher-order thinking skills through WSJ to not only enhance learning, but to manage and innovate abilities as well. Coined by B. S. Bloom<sup>1</sup>, these skills essentially involve students going beyond just understanding knowledge to *applying* that knowledge in relation to real-world contexts.

Higher-order thinking skills directly result from an active *learning* approach where, instead of passively receiving information, students actively construct knowledge themselves. These skills are essential to workplace success and include the ability to analyze, synthesize and evaluate information. WSJ provides a unique platform for increasing higher-order thinking skills across the following areas which originate from Bloom's Taxonomy model:

- Analysis students can engage in critical analysis of the knowledge they are learning
  in applied ways, such as distinguishing between fact and opinion in online WSJ articles,
  comparing and contrasting the beliefs of different WSJ writers on the same business
  topic or applying a financial concept to determine a projected outcome.
- Synthesis students can learn to make inferences, educated guesses based on
  evidence, from WSJ material, such as creating a digital story around data points or
  using data sets to create marketing campaign messages. Overall, the focus is on
  students making inferences from existing materials to create new structures or
  meanings.
- **Evaluation** students can use WSJ materials for *advanced decision-making*, such as in online management simulations based in WSJ industry pieces or company news, where students assume the role of a company's management board and make decisions regarding typical management, business, and remote strategy issues under time pressure.

When students discover knowledge themselves, they develop higher-order thinking skills in the process, such as the two practical skills in this guide: **critical thinking** and **making inferences**. Self-discovery increases a deeper processing and retention of material.

<sup>1</sup> Bloom, B. S., Engelhart, M. B., Furst, E. J., Hill, W. H. and Krathwohl, D. R., Taxonomy of educational objectives. The classification of educational goals. Handbook 1: Cognitive domain. New York: Longmans Green, 1956.

In order to teach higher-order thinking skills online:

- transform students from passive receivers of information into active learners,
   with tasks for students to organize information and monitor their own learning
- shift from creating tasks that target an acquisition of facts, to tasks that target an application and acquisition of strategies
- encourage students to use technology for the communication and discovery of knowledge in order to develop additional higher-order skills (e.g., digital literacy)

# Designing Active Learning Tasks with WSJ Online

Professor Sánchez and professor Bullock use WSJ to design effective learning tasks online in order to move away from activities that share inert knowledge and target tasks during sessions that help students "learn how to learn." Therefore, in virtual lectures, they shift from largely delivering *content* knowledge (e.g., Finance, Human Resources, Public Relations, etc.) to building *skills* in the process (e.g., critical thinking, oral and written communication, and problem-solving).

Using WSJ for online teaching can turn students into more engaged and *active learners*. Professor Sánchez and professor Bullock note that WSJ content is notably powerful in active learning because research shows that the most effective active learning tasks require students to complete assignments that closely mirror the responsibilities of professionals in the real world (i.e. the field areas of financial analysis, laboratory work, the creative arts, or managerial communication). When entering the virtual classroom to generate active learning, professor Sánchez and professor Bullock find it helpful to shift their mindset from "what will I cover today?" to ask "what will my students do today?"

## Types of Active Learning Tasks with WSJ Online:

- **Business Simulations**: engage students with simulations such as team negotiations based on WSJ content and other group virtual problem-solving activities
- **Visual Representations of Data:** encourage students to create tangible digital models illustrating new concepts or complex information, such as infographics
- Applied Approach to Assignments: empower students to complete tasks demonstrating
  a mastery and application of content in workplace scenarios, such as research proposals,
  reports, feasibility studies and business presentations.
- Online Discussions: facilitate student-led virtual or forum Q&A discussions explaining the application of theories to their own goals and interests

# How to Assess Higher-Order Skills Online

Assessment for active learning tasks is performance-based. Therefore, professor Sánchez and professor Bullock suggest using WSJ articles, podcasts, and videos to serve as impactful resources for evaluating students' abilities to apply knowledge from a course to real-world scenarios. Using WSJ resources in performance-based tasks creates powerful alternatives to traditional standardized tests (e.g. multiple choice). Active learning classrooms, typically feature two types of performance-based assessments:

- **Product-based:** students use higher-order thinking skills to *create a product*
- Process-oriented: students use higher-order thinking skills to complete a process

When utilizing WSJ to design active learning tasks online, professor Sánchez and professor Bullock consider the following ways to address assessment whether tasks are process-oriented or product-based:

- Rubrics: Professor Sánchez and professor Bullock design rubrics with clear benchmarks and rating-based categories (in a scale) for students to self-assess and for evaluations to be consistent; they review rubrics with students prior to measuring open-ended tasks that allow for more than one solution.
- **Modeling**: Set students up for success by virtually modeling tasks and sharing sample projects as reference points that embody the assignment criteria.
- Parameters: Professor Sánchez and professor Bullock set clear expectations about
  deadlines and format of deliverables (e.g., online threads, blogs, or posts); they also
  create a positive sense of urgency in terms of delivery date for the product/process
  to be developed as it would be in real-world situations. At the same time, they give
  students the opportunity to adjust and monitor their own learning progress throughout
  the task.

In conclusion, an active learning approach coupled with WSJ is an effective educator formula to create a virtual classroom environment that guides and engages students in the learning process, while applying their knowledge and skills to real-life scenarios. Furthermore, an active learning approach with WSJ online prepares students to independently succeed in the real world. Therefore, this approach ultimately lays the foundation for lifelong development and achievement as well.

(see two active learning WSJ virtual activities on the following pages)

# Sample Active Learning Virtual Activities with WSJ

Activity #1: Parallel Thinking Group Activity Activity #2: Making Inferences

### Activity #1: Parallel Thinking Group Activity

Students evaluate WSJ news article topics from different critical thinking angles ("hats") and perform a holistic team analysis of an issue to guide decision-making. This activity works because the more a problem is reframed, the more solutions become obvious. Use **Edward de Bono's "Six Thinking Hats" model**<sup>2</sup> for small group discussion regarding a WSJ theme trending in articles. The term "parallel thinking" functions as an alternative to adversarial thinking, where critical thinking is born from debate and discussion. This model is more explorative than critical, encouraging students to engage in a cooperative exploration of a topic.

#### **Instructor Preparation:**

- WSJ Sample Article:
  - Monopoly Maker Gets a Big Lift from Lockdown by Paul Ziobro, April, 29, 2020
- Colored backgrounds or other indicators (for virtual learning)

#### **Learning Objectives**

- Create real-world solutions based on critical thinking and metacognition
- Develop teamwork skills and problem-solving skills
- Learn to work in multidisciplinary teams solving actual business challenges in an experiential format

# THE WALL STREET AMEN'AL. BROWNESS Monopoly Maker Gets a Big Lift From Lockdown Same of interloopments pure 20% as side femilies scorp up cleases from Junga to Operation to robe out the composition papeadress: Descript Validates and read sizes soon at analysayar digit sais globally, including a doubter digit cip as there to soon an America analysis of the composition o

#### **Case Summary**

An exponential rise in puzzles, board games and activity sets have surged up to nearly a quarter in retail sales amid the Covid-19 pandemic, as many people seek engaging activities to connect while homebound. Although sales are rising, continuing increases in retail sale trends are expected to become increasingly difficult due to disruptions in manufacturing and in-store shopping. Nearly 55 percent of U.S.-based Hasbro's supply chain comes from Chinese factories, where 85 percent of toys are manufactured. Overall, Hasbro has enough liquidity to manage operations to pay dividends. The students' task is to discuss Hasbro's next strategic initiative for sustaining retail sales during the holiday season, to identify specific data points to support/guide the development of a repurposed campaign, and to develop key messaging with a positive social impact that the organization should use to connect with a global market.

<sup>2</sup> De Bono, Edward. Six Thinking Hats. Boston: Back Bay Books, 1999.

#### Step 1: "Thinking Hat" Roles—each student is assigned a hat:

- Black focuses on challenges and is the devil's advocate
- White focuses on facts known and facts needed
- Yellow focuses on optimism, value, and benefit
- **Red** focuses on the expression of feelings and intuition
- Green focuses on creativity, possibilities, and new ideas
- Blue focuses on managing the entire thinking process and oversees the team of hats

\*Virtual element: Students can alter their Zoom backgrounds appropriately to correspond with their "critical thinking" hat/role or simply adjust their video conference screen names accordingly.

#### Step 2: Groupwork

 Student teams are placed into break out rooms to consider the multiple measurable perspectives, approaches, solutions, challenges, alternatives, goals, and methods regarding this relevant case study or other WSJ newsworthy element of analysis.

#### Step 3: Cumulative Project/Presentation

Ultimately, each student team will need to propose solutions that will lead their
assigned organization to success (e.g. in this case Hasbro). The cumulative project could
be a group presentation, a team paper, or other larger assignment relevant to
the goals of the course.

#### **Higher-Order Thinking Skills:**

This "parallel thinking" model is important for establishing a clear framework for critical reflection and for reframing experiences. The goal is to have students learn to internalize these various "Thinking Hats" to then individually apply all hats when engaging in critical thinking in the workplace. The activity allows students to distinguish between different aspects of critical thinking. Students then learn to integrate these modes of thinking when applying each mode to the same subject with the goal of reaching "full-color thinking" about a subject. Also, in terms of online instruction pedagogy, this assignment provides defined roles, which reduces uncertainty in the virtual classroom, therefore enhancing trust and increasing engagement and productivity.

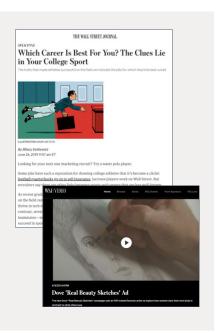
## Activity #2: Making Inferences

#### **Instructor Preparation:**

- WSJ Sample Article:
  - "Does Reality Sell Beauty?" by Shelly Branch and Deborah Ball, May 19, 2005
  - WSJ 2013 Video "Dove 'Real Beauty Sketches' Ad"
- Select highlight statistics from the article and Dove research
- Supplementary data points from Unilever/Dove (specifically around 2013 when the Dove "Real Beauty Sketches" Ad debuted)

#### **Learning Objectives:**

- Demonstrate understanding of data points by making inferences that connect data to larger meanings
- Draw conclusions from real-life data



#### **Activity Directions:**

- Give students 2-3 statistics from an article in order to practice making inferences, or educated guesses based on evidence, from WSJ graphs and corresponding data.
- Provide background on Unilever's Dove "Real Beauty Sketches" campaign without revealing the campaign message.
- Include a discussion of relevant topics in the WSJ 2005 article "Does Reality Sell Beauty?" by Shelly Branch and Deborah Ball. This material, along with other related articles, provides the backdrop for contextualizing the campaign.
- Share with students two key statistics from Dove's research in 2013 that inspired the highly-celebrated campaign:
  - "Only 2% of women in the world consider themselves beautiful."
  - "Over 54% of women globally agree that they are their own worst beauty critic."
- Ask students to synthesize these two data points into a single campaign statement. Students can draft as many as they choose, first alone, and then with a partner.
- Then, reveal the campaign message "You are more beautiful than you think." based on the data and show the WSJ 2013 Video "Dove 'Real Beauty Sketches' Ad"
- Finally, hold a debrief and discussion reflection regarding the students' campaign statements and Dove's branding statement as well as overall campaign. Guide them to reflect on the public service goals of Dove's campaign in their own inference writing. Lead the class in further discussion about how Dove's promotion of a cause rather than products resulted in the campaign's large-scale impact and enhanced Dove's profile.
- Extension activities include larger data sets with inferences targeting complex objectives.

#### **Higher-Order Thinking:**

Overall, the interpretation of data in the form of inferences is an essential skill for turning research into informed decision-making and powerful messaging across professional industries. The ability to make inferences is a valuable skill in knowledge synthesis. Follow-up assignments could eventually culminate into inference-making with a larger pool of data points. Students could also create inferences in either written form or in oral form as part of a presentation assignment using specific linguistic devices.

# THE WALL STREET JOURNAL.