

**Setting the Stage for Junior Faculty and New Instructors:
A Basic Primer for Teaching and Learning**

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All college and university faculty look for ways to enhance their teaching practices. Yet, junior faculty and new instructors in post-secondary contexts indicate greater stress in preparing for and acclimating to their new teaching roles than their more experienced faculty counterparts. This paper provides junior faculty with a basic primer on several learning frameworks and a dozen established instructional techniques that can be used to engage students of all ages and academic levels in traditional, online, and hybrid learning environments.

Keywords: Junior faculty, curriculum design, instructional design, faculty development, teaching

Introduction

Supporting student development and academic success is the predominant focus for faculty and administrators working within post-secondary education. For junior faculty pursuing tenure-track positions or individuals pursuing full- or part-time instructor positions, the idea of embarking on such a new endeavor can be both vastly exciting and personally rewarding. Nevertheless, with limited teaching experience, many new faculty find themselves traversing an unfamiliar landscape when embarking on such a journey (Antonio de Carvalho-Filho et al., 2019; Chase & Thiele, 2015; Gosling et al., 2020). New faculty often find themselves spending an exorbitant amount of time on curriculum planning and assignment development while addressing the different learning and professional needs of both traditional-aged and adult learners. Thus, opportunities for thinking about and creating purposeful teaching practices are critical to sustaining new faculty in their teaching roles (Antonio de Carvalho-Filho et al., 2019; Steinert et al., 2016).

All faculty members and faculty development programming staff must be mindful of the evolving trends within their respective disciplines. New faculty have to understand the latest technological tools for effective teaching while addressing diverse learner populations' contemporary academic needs. These points are especially poignant for individuals trying to acclimate to new, full-time teaching and learning environments. Devising new lectures can be exceedingly intimidating for international faculty who may have trained in one country and have accepted a teaching opportunity in another country. Moreover, junior faculty and instructors must also address additional layers of standards and norms set forth by their programs and institutional stakeholders and any requirements deemed necessary by external governing bodies (e.g., state boards of education, regional accreditors, etc.). As such, providing clear and relevant instruction to a diverse range of learners is no small feat. As Rapp (2014) indicated, "No two students are alike in their thought process, learning styles, abilities, and interests" (p. 2). Junior faculty members often spend more time than they initially expected in developing and fine-tuning their teaching repertoire (Gosling et al., 2020). In essence, junior faculty must determine the most appropriate teaching and learning approaches that bring about the most significant and positive impact on students to support their growth and development.

For many junior faculty, the terminal degree programs from which they graduated did more to prepare them for the rigors of research and creative activities than the realities of teaching and other service-related initiatives germane to tenure-track and other full-time teaching roles in contemporary higher education (Boettcher & Conrad, 2016; Chase & Thiele, 2015). Moreover, as Wilkerson and Irby (1998) note, "Over time, teaching has come to be recognized as a skill associated with, but separate from, content expertise" (p. 388). With the above points in mind, the authors composed this practice-focused article for two reasons. The primary reason is to present junior faculty and instructors with essential information for cultivating teaching and learning practices for their students. The secondary reason is to present college and university administrators (e.g., faculty development coordinators, academic program coordinators, academic deans, etc.) responsible for hiring new faculty with information that could be helpful as a primer for faculty development programs.

While this article cannot possibly cover the entire landscape of instructional practices appropriate for the post-secondary arena, we believe the information presented here provides

junior faculty and instructors with a basis from which to begin developing a practical and relevant teaching repertoire. Moreover, this article's authors believe the teaching and learning practices presented here can be implemented or modified for use in a traditional classroom, an online learning environment, or hybrid learning contexts where the blending of both traditional and online learning practices take place. This article includes information on several instructional frameworks, various teaching considerations, and practical teaching techniques that can be implemented in a classroom or online learning environment.

Instructional Frameworks

The scholarship of teaching and learning, as a field of study, has generated considerable attention. Government bodies, accreditation agencies, and the public have pushed for greater transparency in improving teaching and learning than at any other time in history. Even though many perspectives exist on the progress made, researchers note that educators should attempt to implement instructional practices that are research-based and devote time to reflective practice (Barkley et al., 2014).

Education is continually evolving and changing, and faculty need to be prepared for such changes in their approach to connecting with and purposefully teaching students. For junior faculty and instructors, four components are essential for effective student learning (Fenstermacher & Richardson, 2005). These four components are

- the learner's effort
- social surround (family, peers, community)
- opportunity for learning
- good teaching

Teaching only accounts for one of the components on the list. Nevertheless, junior faculty and instructors can enhance learner effort and promote a more significant opportunity to learn through various frameworks and teaching techniques. While the traditional classroom lecture has long been the standard approach to teaching students in post-secondary learning contexts, by itself, the classroom lecture has been noted as having "limited effectiveness in helping students learn" (Fink, 2013, p. 3). There is undoubtedly a place for the traditional classroom lecture in a professor's teaching repertoire, but other approaches are necessary. Frameworks for teaching and learning are usually research-informed that assist faculty in creating classroom activities, establishing inclusive environments, and motivating students in ways that are congruent with learning goals and objectives. Such frameworks are derived from cognitive, psychological, and sociological research.

Universal Design for Learning

One approach to meeting the needs of all learners can be addressed through Universal Design for Learning (UDL), which is a framework for optimizing teaching and learning. According to Rogers-Shaw et al. (2018), "With UDL, there is a focus on learning relevance, value, and authenticity in terms of learners' needs and desires through the inclusion of real-life tasks and an understanding of the importance of flexibility" (p. 21). UDL is predicated upon scientific insights

into how people learn and develop. For instructors looking to create comprehensive teaching practices for learning environments in post-secondary contexts, UDL is a valuable framework for “designing courses with the intention of helping each student find the approach to acquiring, generating, and using new knowledge that is just right for him or her” (Rogers-Shaw et al., 2018, p. 21). UDL allows educators to present information in ways that frame the teaching-learning transaction differently.

CAST, the organization responsible for creating UDL, provides [comprehensive guidelines](#) to assist junior faculty and instructors in thinking about curriculum and individual lesson characteristics. Novak (2016) expanded on three broad guidelines comprising fundamental UDL characteristics, including (1) engagement, (2) representation, and (3) action and expression (Novak, 2016). Within each of the guidelines, junior faculty and instructors find additional subpoints prompting them to further refine their class experiences.

Guideline 1: Engagement. The first guideline prompts educators to think about or create opportunities for

- promoting course expectations and developing reflection and self-assessment practices
- fostering collaboration and community, while providing expert feedback
- optimizing autonomy for learners and ensuring the relevance of course materials/assignments

Guideline 2: Representation. The second guideline prompts educators to think about or create opportunities for

- promoting relationships between ideas and maximizing transfer and generalization of knowledge
- fostering understanding of vocabulary and symbols, while illustrating new ideas through various media
- allowing various ways of displaying new information and alternatives for auditory and visual information

Guideline 3: Action and Expression. The third guideline prompts educators to think about or create opportunities for

- promoting appropriate goal setting and maximizing planning and strategy development
- fostering communication through multiple media, while utilizing various tools for construction and composition
- enhancing access to assistive technologies and tools

UDL can be a useful framework for junior faculty consideration when designing and developing an academic experience that meets students’ diverse learning needs and with which faculty members will interact (Burgstahler, 2015; National Center on Universal Design for Learning, 2011).

Differentiated Instruction

For many years the trend in education across different age segments has included individuals with exceptional learning needs to the utmost extent possible in educational settings (Turner et al., 2017). Many educators do not have the educational background or training in teaching students whose learning needs may vary from the norm. Also, educators who are well-trained in the areas of individual learning styles, preferences and needs, the previous educational/life experiences specific to exceptional learners, and the features of exceptional learners' abilities (Chu & Garcia, 2018) may not find consistent access to resources within all educational settings. Moreover, environment and context affect an individual's behavior and must be considered explicitly in learning, performance, and planning. Research in education demonstrates that how the learning environment is constructed is closely correlated with connectedness (Wiatrowski et al., 1983). Students' personal and emotional connections with educators are critical in engaging in the learning process. Using the motivational tool of a relevant and authentic curriculum is vital to reaching the assortment of learners in the classroom.

One way to safeguard successful education for all students is by utilizing Differentiated Instruction (DI). DI is a model that is congruent with the basic principles of Universal Design for Learning. By using a range of different teaching avenues for students to understand new content, educators reach all students in their classroom. This form of support ensures that regardless of the students' learning preferences, experiences, and cognitive learning profiles, they have access to learning through approaches that meet their individual needs. When implemented by educators, DI improves the educational outcomes of individuals with exceptionalities and benefits all students in that it accommodates learning styles and the spectrum of learning needs evident in the conventional classroom setting. Implementing DI in the classroom creates a unique learning environment for each student within the same setting, which is part of DI's strength. Using effective instruction while reaching all participants in the educational setting is critical for the retention of learners. Basit et al. (2006) found that learners were more likely to withdraw from their academic programs if potential learning issues were not identified early. Also, aiding students with tailored support during the learning process to encourage confidence and ensure engagement (Vygotsky, 1978) speaks directly to DI principles, which is appropriate for use in higher education contexts (Turner et al., 2017). For more information on ways to differentiate instruction in post-secondary learning environments, please visit [this site](#) and [this site](#).

Problem Based Learning

Problem Based Learning (PBL), by design, is student-centered and student-driven. Much like DI and UDL, it allows the instructor to meet students' needs in various ways. PBL was first implemented at McMaster University Medical School nearly four decades ago to assist nontraditional medical students (Padmavathy & Mareesh, 2013). With this model, medical students are introduced to a real-life medical problem, divided into groups, and given time to use their current medical knowledge to collaborate and research additional information to solve the problem at hand. PBL was instrumental in decreasing the overall time spent in lectures, while increasing student interactions with simulations. Learners become active learners, collaborators, contributors, and problem solvers using this teaching and learning approach (Ali et al., 2010). The teacher's role is to serve as the facilitator of the learning process, offering guidance when necessary

(Gordon et al., 2001). A good learning model like PBL could be relevant and applicable for many disciplines to build students' critical thinking and problem-solving capacity (Amalia et al., 2017).

PBL has been noted as useful for student achievement. This teaching and learning approach provides learners with the latitude necessary to grapple with and reflect on new knowledge for cognitive development, especially in the hard sciences like mathematics (Ali et al., 2010), biology, chemistry, and physics (Gordon et al., 2001; Lambros, 2004). PBL prompts learners to interact with other learners from a social and developmental perspective by connecting, communicating, and collaborating (Boaler, 2019) on new knowledge. PBL provides an exciting approach to discover new knowledge and enhance students' capacity for critical thinking and problem-solving in real-world applications. As organizations become more collaborative, these skills will prepare students to meet the demands of the 21st century and develop lifelong learning habits in the process. For these reasons, faculty must cultivate learning environments through practices that allow students to unlock their full potential and actively grapple with new ideas. Exposing students to the principles of PBL has the potential to raise student achievement while engaging students in critical thinking and problem-solving activities.

Teaching Considerations

Working with Traditional-Aged Learners

Colleges and universities in the United States and Europe have primarily catered to traditional-aged learners' needs since their inception. Age is a significant characteristic that has influenced how traditional-aged learners are classified in such contexts. The literature base in the United States describes traditional-aged learners as typically being 18-24 years old (Soares et al., 2017). While age has been the primary characteristic of distinguishing traditional-aged learners (18-24 years) from their adult learner counterparts (25 years and older), other characteristics further separate the two student groups. Choy (2002) indicated that traditional college students also "earn a high school diploma, enroll full-time immediately after finishing high school, depend on parents for financial support, and either do not work during the school year or work part-time" (p. 1). Traditional-aged learners have limited work and life experiences and depend on parents or guardians to sustain themselves financially. These points are an essential distinction for junior faculty and instructors, as the teaching and learning needs of traditional-aged learners are different from those of adult learners. Thus, junior faculty need to develop a strong teaching repertoire to convey new ideas and thoughts to learners who may have less life experience than their more mature counterparts.

Working with Adult Learners

In the United States, adult learners have become a consistently growing student demographic in post-secondary education for the last few decades (Hussar & Bailey, 2014). Adult learners pursue post-secondary education later in life for a variety of social and economic reasons. Certain characteristics distinguish adults from traditional-age learners. Some characteristics of this learner demographic include, but are not limited to, (1) having low self-efficacy, (2) competing for emotional and social concerns, (3) caring for family, and (4) maintaining employment and

financial stability (Soares et al., 2017; Terrell, 1990). Two or three generations ago, it was not unreasonable for many adults to retain a particular job for the duration of their careers. However, in the last few decades, as consumer demands have shifted, technology usage has increased, and globalization has taken hold of the world, many adults have found stable jobs less plentiful and realized they lacked the requisite skills necessary to succeed in a changing working environment (Kantrowitz, 2010). Adults pursue education due to technological and organizational changes, which have forced many individuals to pursue post-secondary credentials later in life to remain competitive in the workforce (Heidkamp, 2013).

Currently, adult learners make up approximately 35% of the student body at the undergraduate level and most of the student body at the graduate level (National Student Clearinghouse Research Center, 2019). For countries that comprise the European Union, adult learner (25-64 years old) enrollment statistics for 2016 provided by the European Commission for Education and Training (ECET, 2016) noted adult learner participation in formal education varies from country to country. ECET statistics indicated adult learner engagement varied from as little as 1.5% in Slovakia to as much as 14.2% in Finland. Adult learners pursue post-secondary education later in life for a variety of reasons. Supporting adult learners' unique needs is critical for colleges and universities, which should be a focal point for junior faculty when preparing courses focused on adult learners. At some institutions, adult learners have surpassed the number of traditional-aged learners pursuing academic programs and have become the learner majority (Institute for Higher Education Policy, 2012; Soares et al., 2017).

Inclusive Teaching

Inclusive teaching practices must be part of all faculty members' teaching and learning repertoire. The teaching and learning practices faculty choose to implement in their learning environments will have implications for all learners. Inclusive teaching practices promote awareness of diversity and equity, which foster acceptance and prepare learners for a multifaceted world. Faculty must be mindful of their teaching practices. As Ambrose et al. (2010) noted,

Even though some of us might wish to conceptualize our classrooms as culturally neutral or might choose to ignore cultural dimensions, students cannot check their sociocultural identities at the door, nor can they instantly transcend their current level of development....Therefore, it is important that the pedagogical strategies we employ in the classroom reflect an understanding of social identity development so that we can anticipate the tensions that might occur in the classroom and be proactive about them. (Ambrose et al., 2010, pp. 169-170)

Thus, faculty need to create positive and affirming learning environments for all learners.

Inclusive and equity-minded teaching practices require faculty to consider their own biases and perspectives concerning how their curriculum is designed. Inclusive and equity-minded teaching can also be beneficial for students, as it helps them find relevance in the course content and feel open and comfortable to voice their ideas and perspectives in class. When inclusive

teaching practices are implemented, learners are better poised to learn new content and develop important skills. Some scholars have posed thoughtful questions for all faculty to think about when devising their teaching strategies. In particular, Ambrose et al. (2010) invite faculty to think about several important questions, including

- How might your own cultural-bound assumptions influence your interactions with students?
- How might the backgrounds and experiences of your students influence their motivation, engagement, and learning in your classroom?
- How can you modify course materials, activities, assignments, and/or exams to be more accessible to all students in your class?

Educators can access numerous resources focused on inclusive teaching practices, which cannot be fully explored within this article's context. However, educators will be far more effective when considering inclusive teaching practices related to the design of their course curriculum and class exercises. For more information on implementing equity and inclusion-minded practices in the classroom learning environment, please visit [this site](#) and [this site](#).

Establishing Community

When developing an appropriate and effective learning environment, irrespective of the teaching modality (e.g., face-to-face, online, hybrid), faculty new to their teaching roles must consider the importance of establishing and maintaining community. The concept of community is critical when working with adult learners who come to post-secondary education with many life experiences, because “adult learners like to share their knowledge” with other people in various learning contexts (Knowles et al., 2015, p. 297). When adult learners can share their knowledge with others, the concept of community can start being cultivated. Consequently, when combined with learning and knowledge sharing, community creates a synergistic effect spurring greater intellectual capacity in learners. Wenger et al. (2002) addressed this in their research and noted, “Learning is a matter of belonging as well as an intellectual process” (p. 29). It becomes clear that instructional content by itself cannot be the sole basis for instruction. “By learning together in a learning community, students have the opportunity to extend and deepen their learning experience, test out new ideas by sharing them with a supportive group, and receive critical and constructive feedback” (Palloff & Pratt, 2007). One begins to realize that learners search for ways to enrich their personal development and experience a greater connection with others. As such, junior faculty embarking on new teaching roles must think about and create space for community building among learners, including online environments (Banas & Wartalski, 2019).

Several dimensions are needed to establish a community among individuals in various learning contexts. According to Rovai (2001, 2002), the four dimensions that are required to cultivate community include (a) spirit, (b) trust, (c) interactions, and (d) shared expectations. The first dimension, *spirit*, addresses points such as cohesion, bonding, and friendship among learners. Rovai commented that spirit allows all learners to nurture and challenge one another, establishing a caring environment. The second dimension, *trust*, relates to support from other learners. As such,

a person must have established a level of credibility and compassion to create trust with others. The third dimension, *interactions*, relates to quality connections through various assignment-related tasks. This can also be established through a variety of relationship-building assignments and exercises. The final dimension revolves around *expectations*. The learning goals that faculty set for students set the expectations learners need to achieve in class. The points noted above can be implemented in the traditional classroom, online, and hybrid learning environments.

Personalization of Learning

In addition to the various modalities that comprise teaching and learning in contemporary post-secondary education, learners want meaningful, relevant, and engaging learning experiences (Caffarella & Daffron, 2013; Knowles et al., 2015). New faculty should be mindful of student voices and play an essential role in learning. Faculty can work with learners to establish learning plans and goals congruent with learner needs. Thus, learners are looking for more iterative learning experiences to meet their individual learning goals.

Instructional Modalities

College and university instructors are increasingly incorporating various instructional modalities into the organization and content of their courses. The three primary teaching modalities include traditional, online, and hybrid learning. These teaching modalities are especially useful for adult learners in post-secondary learning contexts (Knowles et al., 2015). Technological advances have streamlined teaching practices for faculty. The distinctions that characterize the three modalities are included below.

Traditional Classroom

The most common type of class known to adult learners is the traditional "on-ground" class. These classes are structured where both students and instructors meet on campus in some shared physical space, on regularly set days and times. This course structure is becoming less popular among adult learners due to their personal and professional responsibilities. Yet, traditional classes allow learners to take full advantage of the interpersonal interactions with other learners and the instructor. Many traditional or on-ground courses currently use some type of course management system that incorporates digital gatherings and communication tools within the teaching and learning environment.

Online

Another important modality that is effective for adult learners is the online format. This modality has significantly increased in popularity over the last few decades, where most or all of the content is delivered online. There are no set physical meeting spaces or times, as students work independently or collaboratively throughout the term. Students pursue coursework using a learning management system (e.g., Desire2Learn, Moodle, Canvas, etc.), collaborate on small-group assignments and exercises, and submit their work as they would in a traditional class. Many of the

interpersonal interactions characteristic of a traditional classroom can be recreated to some degree in a synchronous, online course. Meeting with and seeing other individuals in an online class establishes a connection among learners. Also, faculty have become more creative in using active teaching strategies in the online learning environment.

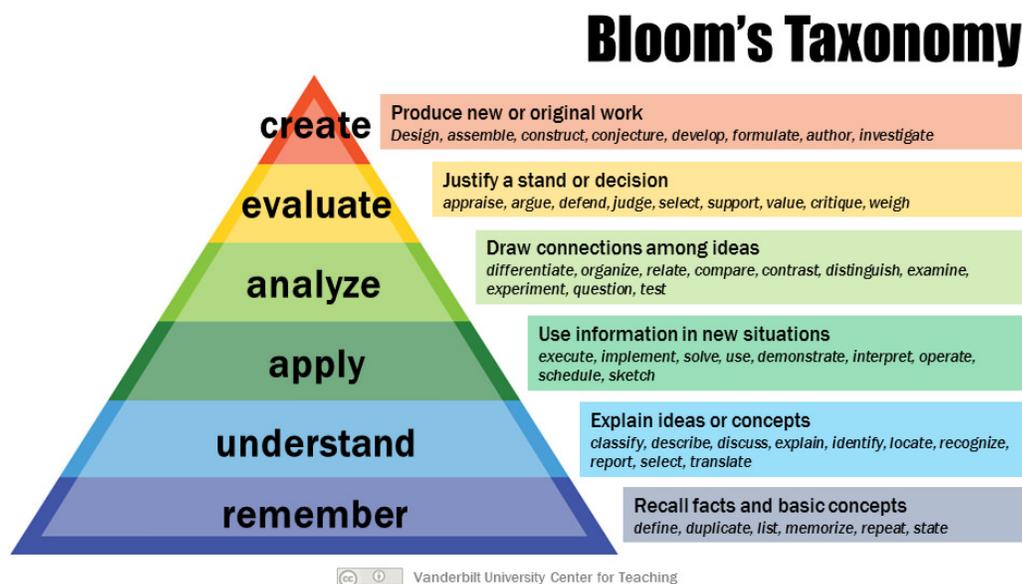
Hybrid

Blended or hybrid courses mix traditional and online modalities to provide a flexible learning experience for all learners. This modality uses technology to foster the best of both traditional and online learning for activities and assignments. Hybrid courses use a learning management system as a repository for course materials while also providing online discussions and exams. Typically, the number of physical classroom meetings is reduced and the number of online meetings is increased. Thus, the professor finds a balance between both physical and online sessions. This is a perfect modality to use with a “flipped classroom” learning approach. A significant amount of work is done by the students outside of the classroom before the scheduled physical meeting. Students can expect to work on virtual activities regularly.

Practical Teaching Techniques

Many times junior faculty come to their new role without teaching experience. Considering the cognitive domain of learning as noted in the updated version of Bloom’s Taxonomy (Anderson & Krathwohl, 2001), six levels of understanding help guide learners from basic understanding to advanced practice of skill and content. Figure 1 shows the levels of Bloom’s Taxonomy in pyramid form, illustrating how the basic levels of understand serve as a foundation for the advanced levels as one moves from the bottom to the top of the pyramid.

Figure 1. Bloom’s Taxonomy



Using the six levels of Bloom’s Taxonomy (Armstrong, n.d.) and advancing demonstrated collaborative learning techniques (Barkley et al., 2014), the authors of this paper provide suggestions that can help faculty enhance their teaching practices.

The following teaching techniques and strategies provide junior faculty with specific and practical tools that will enrich their teaching and provide students an opportunity to engage in collaborative learning. These techniques and strategies can be used in the three teaching and learning modalities (traditional, online and/or hybrid) as defined above. The essential skills that students use during these practical exercises are also identified in Table 1 (Barkley et al., 2014).

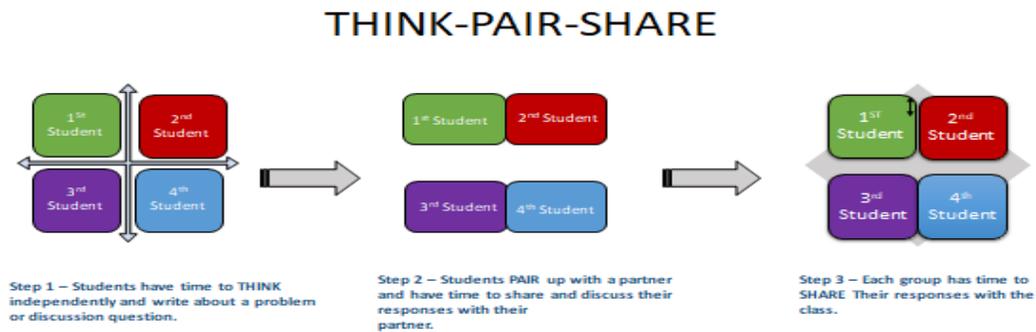
Table 1. Practical Teaching Techniques, Skills, and Strategies

| Technique | Bloom’s Taxonomy | Strategy | Essential Skills |
|-----------------------|-------------------------|-------------------|---|
| Think-Pair-Share | Understand (2) | Discussion | Assertiveness, Communication, Collaboration, Organization |
| Quizlet (Flashcards) | Remember (1) | Assessment | Critical Thinking, Decision Making |
| Trivia/Class Jeopardy | Remember (1) | Assessment | Communication, Collaboration |
| Padlet | Understand (2) | Discussion | Communication, Collaboration, Organization |
| Case Study | Apply (3) | Problem Solving | Communication, Collaboration, Critical Thinking, Problem Solving, Assertiveness |
| Fishbowl | Apply (3) | Reciprocal | Analytical, Communication, Collaboration |
| 3-2-1 | Analyze (4) | Discussion | Analytical, Critical Thinking, Organization |
| Venn Diagram | Analyze (4) | Graphic Organizer | Analytical |
| Kahoot | Evaluate (5) | Evaluation | Decision Making |

| | | | |
|--|--------------|-------------------|--|
| Gallery Walk | Create (6) | Graphic Organizer | Communication, Collaboration |
| Role-Play | Create (6) | Reciprocal | Assertiveness, Communication, Collaboration |
| Jigsaw | Analyze (4) | Reciprocal | Analytical, Communication, Collaboration, Organization |
| 3-Step Interview | Evaluate (5) | Discussion | Communication, Collaboration |
| <p>Essential Skills Definitions: Analytical – Students are able to collect and analyze information. Assertiveness – Students are able to express their views and opinions in a calm and respectful manner. Collaboration – Students are able to successfully work towards a common goal with others. Communication – Students are encouraged to be good listeners, speakers, and observers and to develop empathy. These skills allow students to understand and be understood by others. Creative Thinking – Students are able to consider information, a situation or a process in a new way. Critical Thinking – Students are able to understand the logical connection between ideas through a clear and rational lens. Decision Making – Students are able to use intuition, reasoning or a combination to choose a good option out of two or more alternatives. Organization – Students are able to design and maintain a system for keeping track of information or materials. Persuasion – Students are able to convince others to change their point of view on a topic or during a discussion. Problem Solving – Students are able to assess a situation both difficult or unexpected and calmly identify solutions. (Barkley et al., 2014)</p> | | | |

Think-Pair-Share is a collaborative learning technique that encourages individual participation and allows students to work together to solve a problem or answer a question. This teaching technique was first proposed by Lyman (1987). Think-Pair-Share is a straightforward teaching technique that requires students to think through a question using three specific steps (see Figure 2). First, students are given a question or problem and organize their thoughts independently to form their ideas and responses. When students are given time before participating in discussions, they feel more comfortable (Raba, 2017). Second, students work in pairs to share their unique ideas and thoughts with a partner. Students are given enough time to listen to each other’s ideas and discuss them. The third step requires student pairs to share their ideas and thoughts with the whole group. They are allowed to share what they have discussed in pairs and to express themselves through speaking (Lyman, 1987, 1992). Throughout this three-step process, students become more confident with a partner’s support, and their ideas become more refined. This strategy reinforces students’ communication skills and allows students to convey their ideas and consider those of others. The Think-Pair-Share strategy can be used in a traditional, online and/or hybrid learning environment.

Figure 2. Example of Think-Pair-Share



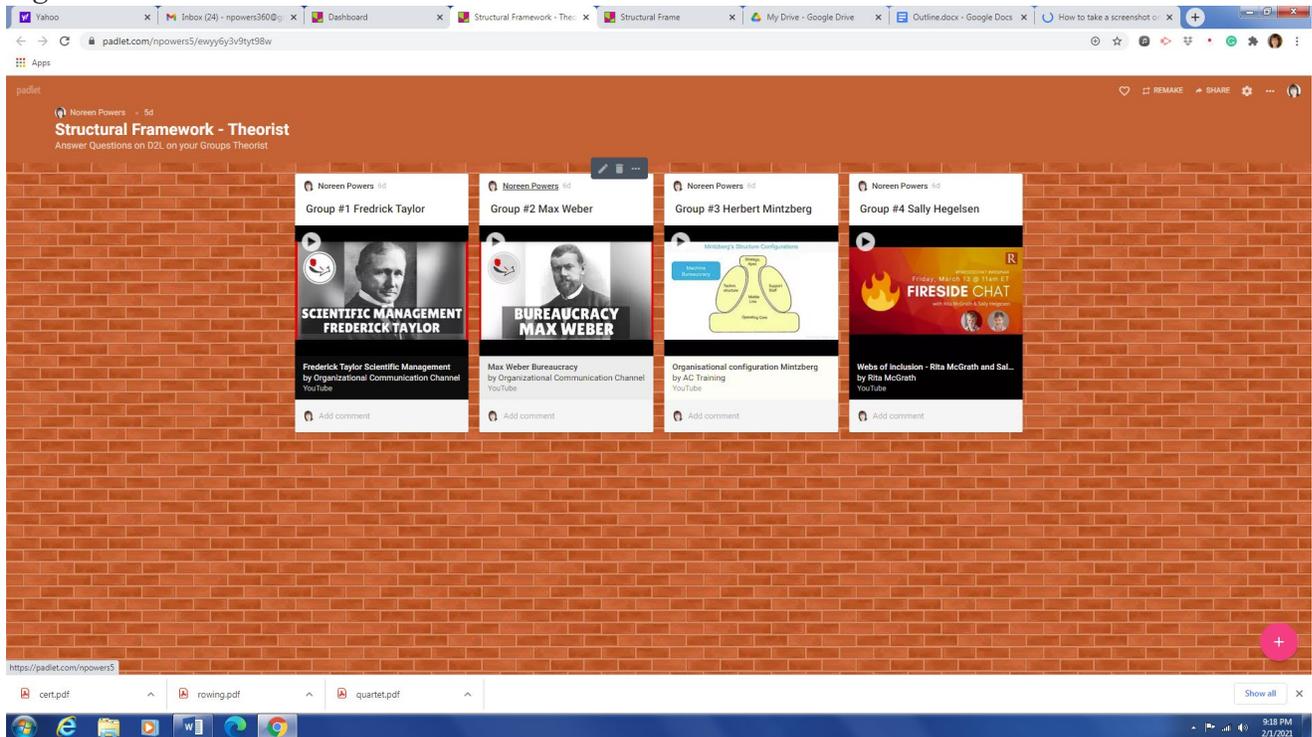
Quizlet is a simple to use, student-friendly website that allows users to create their own student guides or other means of study. It provides learning tools that engage students of all levels. This tool uses curriculum-based materials, interactive study methods, and games (i.e., flashcards, long-term learning and matching) to assess student comprehension. Users can create a variety of study sets with terms and definitions. To start a study set, the student or faculty member types both the term and the definition for each question. Quizlet has no limit for how many questions can be in a study set, which is beneficial for lengthy exams. Access Quizlet’s free website [here](#).

Trivia/Class Jeopardy is an engaging way for students to demonstrate basic content knowledge through multiple categories and questions. As more students seek out interactive learning experiences, the jeopardy game provides a means for assessing content knowledge. Jeopardy allows the faculty member or student to customize templates that can be accessed and played online from anywhere in the world. This game does not require an exorbitant budget, as [online resources exist](#) for implementing this teaching tool in one’s class.

Kahoot is a game-based tool that can be used to evaluate a learner’s knowledge. Faculty and students can create a review game, like Jeopardy, but with four options that the students can select. Kahoot can also be utilized for general quizzes or formative assessments. Another use of Kahoot is gathering student opinions or responses concerning a book, event, or question. This game-based app is used widely in the fields of education and business. In higher education contexts, faculty can create a Kahoot that students can access via technology (e.g., phone, tablet, laptop, etc.), and it can be created in any language. This tool is free to users. Access Kahoot [here](#).

Padlet is a free online bulletin board that students and teachers can use. With Padlet, users create an online post-it, assignments, and discussions on a common page (see Figure 3). These posts can contain links, videos, images and document files. Padlet also provides a space for students to work collaboratively on assignments during or after class. The Padlet unique link is easily shared with students to allow them to insert ideas anonymously or with their name. When new information is posted to the page it appears immediately. The Padlet page can be used as a reference for teachers and students to access at a later date and time. Access Padlet [here](#).

Figure 3. Screenshot of Padlet

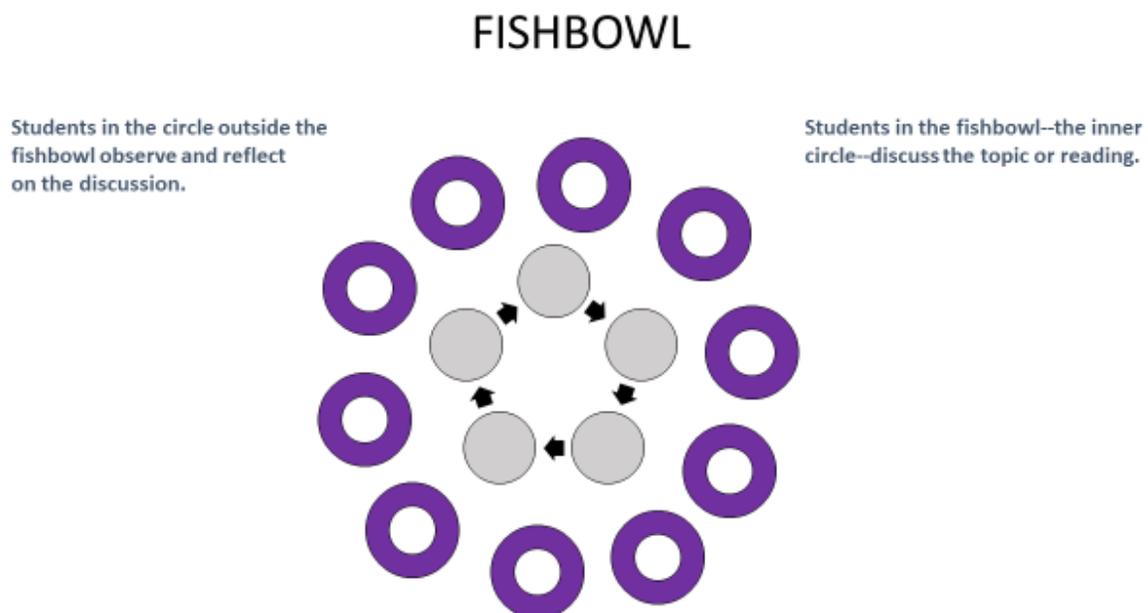


Case study, also known as the case method, was promoted by the Harvard University Business School over 100 years ago. The business school had begun using real cases from business and industry to help students tackle real-time problems. More specifically, teaching case studies provides learners with an account of a real situation, generally involving a particular concern, challenge, or other opportunities that individuals have experienced in organizational contexts (Herreid, 2006). Case studies have been widely used in science and business for more than two decades. Bonney (2015) conducted a study to see if case study teaching methods were more effective than classroom discussions and textbook readings for developing students' written and oral communication skills, learning vital biological concepts, and strong comprehension of biological concepts' relevance in everyday life. Based on Bonney's findings, case studies should be considered a preferred method of teaching various concepts, especially in the hard sciences.

Case study teaching is a highly adaptable style of teaching and promotes the development of analytical skills. According to Bloom's taxonomy, the case study teaching method enhances learner development moving beyond rote memorization of knowledge and facts for application. Case studies are helpful to learners in demonstrating connections between scientific topics and real-world issues and applications. Moreover, case studies demonstrate effectiveness at promoting learning gains regardless of who authored the case study. Case studies written and published by unaffiliated instructors are just as effective as those produced by individuals affiliated with the course, which suggests pre-published versions are effective (Bonney, 2015). Case studies, as Schmidt (2010) noted, can help us "learn from both the positive steps and the mistakes of others without having to actually do anything other than analyze the case study" (p. 3).

Fishbowl is a teaching strategy that helps students practice being contributors and listeners in a discussion. Students ask questions, engage in an in-depth discussion, present opinions, and share information (e.g., how they think about it, why it is important to them, etc.) when they are placed in the inner circle or “fishbowl,” while students in the outer circle listen carefully to the ideas presented and pay attention to the process (see Figure 4). The students in the outer circle are asked to summarize or paraphrase what they heard. Students in the inner circle can confirm or clarify these remarks. The students are then instructed to switch places and repeat the process. During the exercise, the teacher has an opportunity to hear the experiences, ideas, and feedback from students, while students get an opportunity to be active in the dialogue and hear the other students’ ideas. This strategy can create an engaging environment for initiating essential topics and is particularly useful for discussing current events or controversial topics. Larzon (1999, as cited in Fisher et al., 2007) noted that a discussion strategy is successful when it enriches the understanding of disciplinary topics through the exchange of a variety of viewpoints and includes the view and participation of all students. Most importantly, these conversations create understanding and empathy about the diversity and range of opinions and viewpoints within a group (Fisher, 2007).

Figure 4. Fishbowl diagram

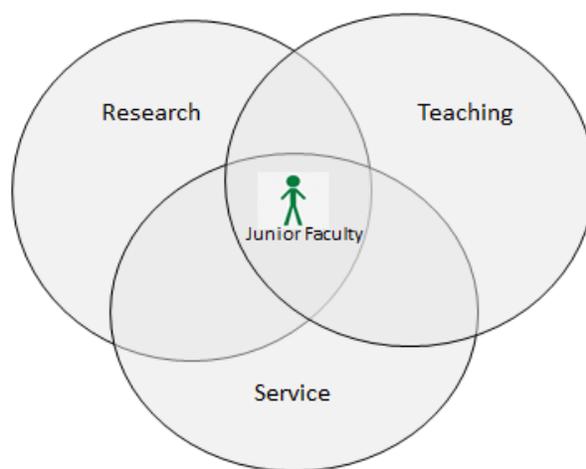


The **3-2-1** teaching strategy entails having a student describe (a) main points learned from the reading, (b) two quotes noted as being salient or noteworthy for comprehension, and (c) one

question the student has about the material. This approach can assist students immerse themselves more fully in a book, article, or other text the instructor deems noteworthy. Some faculty may use this approach in a face-to-face class whereby students document their responses on cards or small pieces of paper and then use them as exit tickets or slips when class concludes or in an online discussion format to spur further inquiry.

Venn diagrams (also known as **logic** or **set diagrams**) are a type of graphic organizer. Graphic organizers are a way to organize complex relationships visually. Based on a branch of mathematics called set theory, John Venn developed this graphic organizer in 1891 to show relationships between sets (Mahoney & Vanderpoel, 2015). Venn diagrams are now used across many disciplines and can help learners identify and organize new information, emphasizing how two or more sets of items relate to one another (see Figure 5). Learners can distinguish the differences and similarities among various concepts. This type of visual representation can be beneficial to visual learners and is a versatile in the fields of business, mathematics, and linguistics.

Figure 5. Example of a Venn diagram



Gallery Walk/Carousel is a teaching strategy designed to have students respond to topics or prompts by physically moving in a circular fashion around the room (Guillaume et al., 2007; see Figure 6). Osborn (1953) was the first to introduce a chart paper listing various topics or questions posted around the classroom. This strategy asks students to do a quick, personal share about the instructor's topic or questions. Students are divided into small groups, and each group is given a different color marker to identify that group's response. One member of each small group is assigned as the recorder. The topic or questions are posted, one per station, around the room, and students must visit each one with their group. Each group starts at a specific question and provides concise responses. Each group is given three to five minutes to brainstorm anything related to the topic on their chart. Once the three to five minutes are over, the groups move clockwise around

the room. Each group visits each chart, reads what the previous group wrote, and then adds to the list using their designated color marker. Groups move from chart to chart until they reach their original chart. At the end of the activity, the charts contain information from each group in a color representing that group. This exercise allows students to be aware of what others are thinking and for the instructor to understand student perception on a particular topic. The various perceptions among students provide an opportunity to engage in further discussion on the topic or questions. This is an excellent strategy to use for a review before an exam.

Figure 6. Example of a Gallery Walk/Carousel

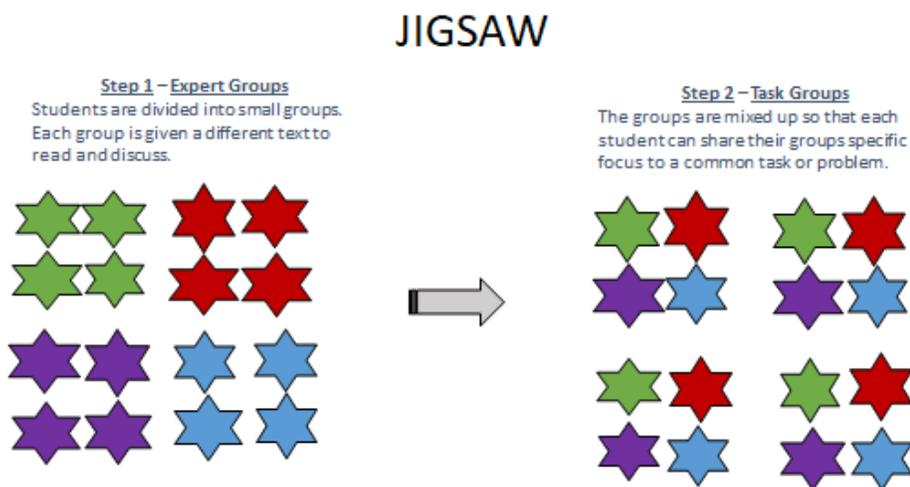


Role-Play is a teaching technique where learners investigate real situations or establish scenarios that allow them to take on identities requiring applying knowledge and skills, thereby gaining various perspectives not known previously. Role-Play is highly flexible, which leaves room for individual creativity and imagination (Ladousse, 1987). This technique promotes interaction in the classroom and peer learning, increasing motivation (Livingstone, 1983). Classrooms that use role-play tend to foster a less anxious and fearful environment for learning. As such, students are more likely to share their ideas and take more risks in their learning, which creates a classroom characterized by “community sharing” (Adams, 1973). This teaching approach requires no budget and can be used in traditional, hybrid, and/or online environments.

The **Jigsaw** technique is a method of organizing classroom activities or assignments that make students dependent on their group members. Each student must cooperate with their peers to achieve their individual goals. Just like a jigsaw puzzle, each piece or each student’s part is vital for the production or full understanding of the final product (Aronson & Patnoe, 1997; see Figure

7). This technique is more likely to succeed if used to practice, review, and apply skills that students already have familiarity with from previous classes or assignments. In Step 1, students are put into small groups and are responsible for reading one segment of an article or reading assignment. The group reads only their assigned content, and they become the expert on that content. In Step 2, one member from each group disperses to other groups to teach what they have learned, which completes the “jigsaw” puzzle. This strategy can be used in a traditional, online and/or hybrid learning environment.

Figure 7. Example of the Jigsaw process



The **3-Step Interview** is a learning strategy that combines role-playing and discussion to facilitate student learning. This technique allows for student skills development, including active listening, note-taking, and other interpersonal communication. This strategy enhances student engagement and accountability by combining question-and-answer sessions with interviews. It provides each student an opportunity to voice their opinions and promotes equal participation. Students are placed into small groups and each member in the group assumes a role that consists of either interviewer, interviewee, reporter, or note-taker (see Figure 8). In Step 1, Student A interviews Student B. In Step 2, students switch roles and Student B interviews Student A. In Step 3, students A and B summarize their partner’s response for the other students in the group. The three-step interview strategy helps students enhance their learning by drawing on their unique, inquisitive nature and developing their interviewing and reporting skills.

Figure 8. Illustration of the Three-Step Interview process



Conclusion

Educators, especially junior faculty, report varied experiences acclimating to their new roles (Antonio de Carvalho-Filho et al., 2019; Chase & Thiele, 2015; Gosling et al., 2020). As technology continues to permeate higher education, this faculty demographic must usher learners through the learning process using various teaching techniques in different modalities. Providing junior faculty with a basic set of resources to engage learners meaningfully in the teaching and learning process can be a welcome lifeline. The tips and resources provided in this practice-focused article can aid junior faculty and faculty development program coordinators by serving as a primer on learning frameworks and teaching strategies to meet learners' diverse needs.

The authors believe that faculty development should be purposeful and enjoyable, especially given the challenges and implications of the COVID-19 pandemic. When junior faculty feel supported and have resources to address their teaching responsibilities, they can thrive in the ever-changing landscape of higher education. The more quickly faculty can establish a viable teaching repertoire, the sooner they can balance other work responsibilities (e.g., service, research, etc.) with their teaching duties. We hope this article provides junior faculty and new instructors with a basic set of ideas for cultivating supportive and holistic learning environments.

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