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Minimizing the Familiar and Maximizing the Diverse: Emergent Pedagogy and Self-Differentiation in a Post-Covid World

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Part One: Introduction

As a creative educator, I work with and against classroom expectations to embrace the surprises, inspirations and ah-ha moments indicative of emergent pedagogy. For me, this conscious choice to accept change and spontaneous interruptions stems from a time when I was not so accepting or flexible.

In 1995, I gave a two hour lecture on the role of Canadians in World War II to 500 Canadian Studies undergraduates. At that same moment, Canadians from across the country were travelling on buses to Quebec, a province in Canada that was having a referendum on separation. The travelling citizens wanted to show their support for Quebecers and to encourage them to stay within the Dominion. My reluctance to stray from the recipe, and my desire to protect the podium was costing my learners an opportunity to learn through action. Half way through the lecture, I moved from behind the lectern, stepped down from the elevated stage, sat among the crowd and facilitated a rich conversation about how I had failed them by remaining in our lecture hall, and how real-world events affected us. It was a teachable moment demonstrating the fullness of being responsive to emotions in the room and following an extemporaneous, or emergent pedagogy model.

Some creative educators embrace change and demonstrate an increased agility in teaching and learning that is responsive to learners' needs and to the unpredictability of the greater social-political context. This disposition is not something that came naturally to me until I realized I could teach despite the way I was taught. Over time, I accepted and welcomed uncertainty as a common element of responsive teaching. Through consistent reflection and a pedagogical crisis in Israel (Boyko-Head, 2020) the concept of emergent pedagogy developed. I came to appreciate the unexpected in the classroom as chances to demonstrate that these unpredictable moments were about perspectives and were easily addressed through open conversation. Ironically, this rising inclination toward the unexpected prepared me for the educational crisis resulting from a global pandemic.

The 2020 pandemic generated a disruptive environment, accelerating an educational restructuring that has been discussed for years. The academic challenges of 2020 were shocking and severe as family, school and work converged in the home. While it was a situation no one wanted, human resilience shone through as people across the world found novel ways to demonstrate their humanity, creativity, compassion, humour, knowledge and dignity. In education it was an opportunity for innovative pedagogical practices, especially in the areas of emergent, inclusive pedagogy, and differentiated learning –all of which are based on an acknowledgement of the 21st Century's educational context that minimizes the familiar and maximizes the diverse.

The Context

Even before the pandemic's interruption of the 2020 academic year, learner motivation and engagement were academic concerns. How might I increase learner engagement by being responsive to their needs and passions? This exploration intensified when I realized that the undergraduate learners I could relate to in the mid 1990s, before a ten year interval teaching at the graduate level in the United States and Israel, were no longer the learners of the 21st Century. When I began my teaching career, learners' experiences, goals, frustrations, struggles and desires were familiar to me and resembled my own student experiences. Students seemed homogeneous and reflected a learner profile resembling characteristics, attitudes and skills I could relate to. In short, I understood the academic challenges they were facing, and knew that with perseverance, grit and effort they would survive.

At least, that is what my naïve and privileged perspective thought until I returned to undergraduate teaching in 2011. Then, my own suppressed memories of intellectual deficiency when this imaginary learner/graduate profile didn't resemble me resurfaced. As I looked at my heterogeneous learners, feelings of inadequacy grew. In ten short years, the educational ecosystem amplified a hidden and ignored diversity. Change was in the open, as classroom demographics consisted of first-generation, second-career, Indigenous, International, LGBTQ2, and unique-ability learners. Discernible inclusivity seemed to be a positive step toward education equity. Still, I felt ill-informed about and unacquainted with the multifarious demands facing these learners and how I could meet their learning needs.

As demographics diversified, discussions around the role of academia changed, as well, reflecting industrial and social disruptions and concerns (Wagner, 2015, Robinson, 2010, Evans 1996). The 20th Century focus on specific hard skills and conformity to a hierarchal work structure and ethics gave way to the 4th Industrial Revolutions' demands for innovative thinking and agile practices (World Economic Forum WEF, 2016, 2016b).

Industry leaders noted skill gaps between what they needed and what graduates had. They acknowledged graduates were adept at current hard core skills, but industries' acceleration of incremental innovations indicated that hard skills were not enough and could be redundant in some sectors. What industry really needed was a new-fangled graduate receptive to change, open to risk-taking, and continuously learning new information and skills. This signified a minimizing of the familiar graduate profile skilled at following directions and a maximizing of new profiles prioritizing innovation, agility, and an emergent spirit willing to face a diversifying global context.

While institutions discussed how to meet industry needs, other conversations in academia circled around delivery models and the impact of technology on learning. The apparent success of open, online classes fed the discourse. Still, many preferred face-to-face over virtual instruction, especially since there was no conclusive evidence supporting online learning's advantage to learner success. Without a compelling need for technological delivery modes, most institutions and faculty privileged familiar delivery models suitable for the traditional, 20th Century learner profile. Instructors who sampled innovative, digital practices seemed to do so in order to accommodate 'digital natives' assumed preference for anywhere, anytime learning on their personalized devices. Both learner profiles, the traditional and the digital native, are based on stereotypical generalizations that ignore each group's social, economic, political, and geographical inequities.

The discussions around higher education's skill gap and delivery models, though distinct, are interconnected because both reflect a minimizing of the familiar and a maximizing of the diverse. The skill discussion revolves around content, while delivery discussions pertain to form. Both discussions require a revisiting of the ideal learner profile and an acknowledgment that it no longer represents reality, if it ever did. Both discussions require an acceptance of change. According to Paul Smith (2018), "the first obstacle to change is getting people to accept that change is needed" (p28). Prior to the spring of 2020, educational change was still a choice heavily debated. There was no necessity for change; it was an option and many educators elected to leisurely address diversity while remaining faithful to what was customary in the classroom.

One reason for the discussions' sluggishness may be our inherently negative disposition toward change and uncertainty: paradoxically, humans are capable of immense innovation, yet prefer habitual thinking. Thus, minimizing the familiar and maximizing the diverse in any situation, let alone something as steeped in convention as education, is not intuitive, or willingly sought and accepted by most people. So, conversations about educational modifications continued, while teaching and learning stayed basically, the same. Until, that is, the early months of 2020 forced everyone's hand to change.

Covid-19's global sweep disrupted educational conversations, institutional plans, teaching models, and learning competencies. After mid-March 2020, teaching and learning moved online, forcing faculty, despite experience and pedagogical philosophy, to engage with technology. Content was also reduced, unintentionally reflecting the pedagogical framework of Backward Design (Wiggin & McTighe, 1998). The compressed, online semester consisted of essential content only and placed faculty and learners into an involuntary, innovative circumstance that minimized the familiar and maximized the diverse. Change in teaching and learning came out of necessity as all educational participants were forced to taste and swallow a new emergent pedagogy. While this forced pedagogy was responsive to a global crisis, it also raised awareness of learners' social and economic contexts, industrials' skill needs, society's obligations to communal safety, and technologies ability to innovate learning in a way that might democratize learning.

Democratized learning

To minimize the familiar and maximize the diverse in education requires an approach to teaching and learning that differs from the norm. One such approach is an emergent pedagogy utilizing diverse learning tools and practices responsive to an authentic view of learners and their needs. The learning situation instigated by the global pandemic highlights that responsivity may also mean spontaneity since learners' situations, and social contexts were constantly changing. Undoubtedly stressful for many learners, educators and administrators, the navigation of this unusual situation demonstrates the value of responsive teaching and the ability of faculty to employ fluid practices for the sake of safe learning. Solutions weren't perfect. In fact, the move to online learning highlighted major inequities between learners and regions. Still, the spring of 2020 taught society and educational institutions that change could be managed quickly, responsively and responsibly.

Without knowing it, everyone was in some way experiencing the synergy of emergent pedagogy. A pedagogy that attempts to democratize learning by being flexible toward form and content, and by balancing conventional analytics and quantitative data about learners with qualitative, personal interaction with them. Emergent pedagogy and conventional teaching practices may both take a user-centred perspective to curriculum development. However, emergent pedagogy is based on curriculum choices evolving from actual exchanges with learners and not from a pre-determined learner profile. Thus, ambiguity, curiosity and iteration become prime elements in a creative, equitable and inclusive learning environment.

To say educational practices and policies are based on a human-centred approach is easy and accurate when considering a conventional, learner profile. Newton (2016) asserts the dangers of instructors being "thwarted by individual differences" (p24) when they put their faith in broad generalizations. As mentioned earlier, the conventional learner/graduate profile is based on sweeping stereotypes creating an imagined ideal that fails to account for external pressures on learning, including family dynamics, geography, income, politics and cultural legacies. Today's learner is complex, diverse and constantly in flux due to volatile, uncertain social, political and economic factors. Institutional policies and practices cannot respond in a timely and adequate manner to the inclusive, equitable, diverse needs of a mutable learner profile.

In fact, until Covid-19 the issue of learner profiling may be the most ignored act of implicit bias in the education system. In trying to address the challenges created by the pandemic, institutions and educators could no longer overlook real learners' complex social relations and practices, economic struggles, and geographical limitations contributing to unequal opportunities, costs, and technological accessibility. The ideal, imaginary learner/graduate profile that had poorly represented

so many learner experiences, even with its heroes and holiday colouration, would finally be exposed as a fraud. Covid-19, while devastating, forced institutions and society to recognize the challenges facing 21st Century learners.

As in most examples of forced innovation, practice informs policy. Thus, the classroom then becomes the perfect setting where an emergent, human-centred approach to teaching and learning can be performed. This requires a tolerance for ambiguity and risk-taking among all learners, including the traditional instructor. Such a dynamic, responsive attitude democratizes teaching and learning by sharing ownership of and accountability for learning with everyone in the learning environment. This translates into the creation of content and assessment frameworks centralizing learners' needs, passions and purposes as curriculum drivers. Everyone learns from each other's contexts to build perspective and empathy.

Significantly, these transferable frameworks need to be accessible to all learners and that means not just presenting them as content to be regurgitated, but uncovering them as processes to be adapted to multiple functions. Thus, emergent pedagogy requires, amplifies and develops flexible processes, tools and strategies suitable for indeterminate academic, social and industrial scenarios. Modeling and practicing transferable and contextually-responsive competencies, learners are empowered with agile frameworks, such as creative problem solving and 3D-Briefing, that can be adapted to fit their own needs. Significantly, the variety of applications is shared when democratizing teaching and learning invites every voice to the table and celebrates diversity's role in innovative and creative thinking.

Just as the learner/graduate profile needs to authentically reflect the new demographics, emergent pedagogy and its democratizing agenda acknowledges diversity's positive pole while also addressing its negative underbelly. According to Yorks and Kasl (2002) maximizing diversity increases innovation and can also increase resistance and conflict. Emergent pedagogy manages this paradox by using the flexible frameworks mentioned above to prepare learners for living, learning and working in volatile, uncertain, complex and ambiguous contexts, also known as VUCA (Adamson, 2012). Within the classroom's rehearsal space, learners practice minimizing the familiar and maximizing the diverse in ways that challenge gender, racial and socio-economic stereotypes, bias, and mindsets. Making the paradox of diversity transparent, making tools to navigate the paradox accessible, and making the application of these tools transferable to learners' individualized needs and purposes is the goal of emergent pedagogy and democratized learning. This goal encourages learner autonomy, accountability, and self-efficacy as confidence, intellectual capacity and competencies grow, thereby, preparing learners for an indeterminate future they can't even imagine.

Transferable, flexible competencies

20th Century learning demands were simple. Learners would select a discipline with specific hard skills to master. Now, educational institutions prepare learners for jobs not yet defined or imagined. This ambiguous employment context defines the 4th Industrial Revolution, STEM education, and a focus on how to robot-proof our future. (Aoin, 2017, Mourshed, Chijioke, & Barber, 2010, WEF, 2016, 2016b).

Not all learners fit, or desire, scientific, technological, engineering and mathematical STEM vocations. The question facing new learners in the 21st Century is not what discipline to enrol in. Digital and technological literacy impacts all sectors. The major concern for learners and institutions is how to produce graduates with robot-proof skills before they even enter the job market (Aoin, 2017). To help answer this question, the World Economic Forum (2016, 2016b) identified the top ten skills graduates would need in 2020 to be successful in a VUCA job market. There are four competencies mentioned in the 2016 World Economic Forum (WEF) report that consistently appear in subsequent skill reports and they reflect the skills amplified in emergent pedagogy and democratized learning.

The four skills are:

1. *responsible*, complex problem solving;
2. *creative*, critical thinking;
3. *inclusive* collaboration; and,
4. *effective, empathetic* communication.

I have added the italicized adjectives to signify the equitable imperative of today's complex, heterogeneous world. Problem solving and thinking critically must find responsible, creative solutions that take various perspectives and socio-economic contexts into account. Likewise, creative thinking is critical in dealing with the complexity of social issues resulting from decades of social neglect, blindness and carelessness. Also, it is no longer acceptable to collaborate without being culturally-aware, responsive, inclusive, and therefore, equitable to all people. Accompanying these skills, communication needs to be effective in establishing meaningful social transactions and relationships that initiate, sustain, and empower conscientious, responsible actions from all citizens.

Differing from hard skills, the 4C's listed above are process-oriented, emergent competences transferable to diverse contexts. Iterative in nature, transferable skills magnify an innovative mindset valuing trial and error as fast and early failures build resilience and perseverance. These skills lace a growth mindset highlighting the competitive advantage of seeing opportunity within difficulties. Specifically, complex problem solving, and creative thinking frame uncertain, woolly challenges as problems to be solved. Utilizing equitable and empathetic collaboration skills and communication tools ensures that solutions maximize various lenses and perspectives, and minimize familiar patterns and tired responses. The 4Cs encourage a fair, conscientious exchange between people and set the scene for a democratized society free from destructive bias and prejudice.

Practicing and applying complex problem solving, creative-critical thinking, inclusive collaboration and effective, empathetic communication is grounded in a pedagogy that minimizes the familiar and maximizes the diverse. Emergent pedagogy empowers learners with tools and strategies they can use in their individualized navigation of learning challenges, and in coping with their unknown futures. In addition, emergent pedagogy emphasizes differentiation as a self-managed practice, placing the responsibility for learning in the hands of all learners.

Differentiated learning

Ineffective and insufficient learning environments, inauthentic assessments, and irrelevant curriculum jeopardize learner engagement and motivation (Hammond, 2015, Dweck, 2006, Pink, 2008, Newton, 2016, Reis & Renzulli 2018). Some scholars endorse differentiated education as a remedy to this toxic situation. Reis and Renzulli discuss the five dimensions of integrating differentiation into teaching practices (2018). They also admit to the difficulty of such a widespread movement. They note that other scholars take a harder line with differentiation by rejecting its possibility on account of planning and managerial issues, little administrative support and state assessment concerns (Reis & Renzulli, 2018). Newton (2016) also observes that one lesson cannot accommodate individual differences in learning preferences, nor the widespread interests, purposes and passions of learners.

Such concerns, while well-founded, are based on what Tomlinson and Moon classify as a misinterpretation of differentiation as the creation of different activities and assessments for different learners. They are also based on seeing differentiation as teacher-driven rather than as something initiated and maintained by learners. As a teacher-driven task, differentiation faces challenges, especially for large, diverse post-secondary classrooms. One solution is transferring the responsibility of differentiation from teacher to learner. Making learners the drivers of their own differentiated learning means giving them tools to understand, modify and apply diverse thinking phases to tasks. Differentiation becomes a learning tool wielded by learners rather than a teaching practice controlled by educators. As Hattie states "differentiation relates more to addressing students' different phases of learning from novice to capable to proficient" (Hattie, in Tomlinson & Moon, 2013). Demonstrating

how thinking rises, like bread in a pan, from simple to full thoughts through accessible and adaptable tools makes differentiation a tangible personal application with long-lasting impact.

Despite clarifying the definition of differentiated learning, a lack of accurate, reliable information about learners creates another difficulty for differentiated learning (Reis & Renzulli, 2018). There exist few accurate measures informing educators about who their learners are, what they need to learn, and how they need to learn it. This challenge is further complicated when institutions gather superficial information about learners leading to stereotypical assumptions. Like the ideal learner and graduate profiles that ignore social, economic, gender, age, geographical and ethnic contexts, learning profiles misjudge, limit and pigeonhole learners in unrealistic and biased categories.

According to Tomlinson and Moon (2013) learners do not approach all learning content and contexts the same way. As in to cooking, where some individuals prefer following a recipe while others are more spontaneous, learners display inclinations toward specific thinking and problem solving steps (Puccio, 2002). For example, some see the whole meal while others have a knack for details. Similar to the paradox of diversity, learning styles and cognitive preferences also consist of a paradox where a so-called strength, overused and relied upon, can become a detriment when other steps are resisted or avoided. Ability is falsely identified through actions the individual does and does not perform. Unfortunately, this transforms personal preference for and resistance to specific thinking steps as a competency measure. However, learners' awareness of the preference paradox helps learners reframe and balance the perception of their strengths and limitations as a management issue pertaining to how they respond to the familiar and the diverse. This view makes differentiation a self-managed, learner-driven response to the paradox of diversity and the paradox of thinking preference.

Differentiation in the 21st Century classroom is a learner-driven initiative supported by an emergent pedagogy that leverages diversity to add real-world value, and relevance to the curriculum. This relevance comes from learners choosing the appropriate tools to self-manage their uncertain, complex, individualized contexts. In this way, transferable processes, tools and strategies help learners self-differentiate and fulfill what Carol Ann Tomlinson states is the essential goal of differentiation: "to develop awareness [in students] of which approaches to learning work best for them under which circumstances, and to guide them to know when to change approaches for better learning outcomes" (Tomlinson & Imbeau, 2013). In this way, learners self-regulate and self-manage flexible processes and tools responsive to their individualized learning needs, competency development, personal interests, and social, political, and economic contexts. Based on self-awareness, self-modification, and self-regulation, differentiation is a viable educational innovation for a diverse educational ecosystem.

Learning as a self-differentiated problem to solve

Everything we do is either an intuitive or purposeful problem to solve regardless of complexity. Problem solving proceeds through four, distinct and essential steps. Unless these steps, and the associated divergent and convergent thinking that happens within each step, are explicitly explained, most people take shortcuts in problem solving, making a natural and universal process (Puccio, et al, 2014) appear random, or the skill-domain of a privileged few. Countering this, the founders of creative problem solving, Sid Parnes and Alex Osborn, stressed in the 1950-60s that the process was a transferable skill anyone could learn and apply to various milieus. Since democratizing learning means giving all learners equal and equitable access to information and skills, demystifying the problem solving process is a priority for emergent pedagogy and a necessity for self-differentiated learning based on thinking preference management.

To elaborate, creative problem solving consists of four cognitively discreet steps: clarifying, ideating, developing and implementing. Although divergent and convergent thinking occurs in each step, clarifying and developing prioritizes a convergent, or focused outlook, while ideating and implementing highlights a divergent, expansive, disposition. Each step in problem solving is equally important and value-neutral creating an impartial, balanced system. Task sophistication or difficulty,

and individual preferences toward a particular thinking style may alter this equilibrium. Inescapably, individuals display idiosyncratic differences when problem solving. This is similar to learning progressions where "students do not all learn at the same rate, in the same ways, or with the same degree of sophistication" (Tomlinson & Moon, 2013, p72). Known as cognitive preferences, the individual's thinking penchant maximizes familiar actions and viewpoints and minimizes diverse actions, ideas and perspectives.

These preferences can distort problem solving's stable, unbiased sequence by prioritizing and privileging one problem solving phase over another. Likewise, the familiar action becomes the individual's perceived, cognitive strength while the avoided actions and thinking mindsets are perceived as limitations. Building energy, motivation and a sense of mastery for that particular problem solving phase triggers a compulsive favouring of and returning to that particular cognitive action. Preferring a particular problem solving step does not signal a lack of ability in performing the other steps. Rather, it signals a shortcut in thinking that potentially limits innovative, inclusive and equitable possibilities. This bias creates an imbalance in an otherwise open-minded and neutral process that may or may not impact the outcome. Failing to equitably proceed through the steps, learners perpetuate incomplete, privileged and limiting processes and thinking.

Cognitive preferences, like our taste for certain foods, may not change over time (Puccio, Miller, Schoen & Thurber, 2014). However, taste does mature and develop. Thus, as an acquired skill, creative problem solving can challenge habitual and biased thinking and actions. Significant to emergent pedagogy and equitable, inclusive, diverse learning, environmental processes and personal awareness lead to self-differentiation. Making the problem solving process transparent and accessible to learners gives them the ability to manage, control and develop skills applicable to multiple situations. Aware that individuals use familiar thinking styles when solving problems, learners can better understand themselves and others. This can lead to an empathetic viewpoint in learners, and a growing ability to self-differentiate their approaches to learning by helping them select appropriate tools for different challenges.

Conclusion

Minimizing the familiar and maximizing the diverse in teaching and learning means making processes and strategies transparent. This behind-the-scenes view uncovers learning as accessible to and transferable by all learners. Such an awareness reduces the misinterpretations and conflicts that can arise when differences are not viewed as cognitive preferences for a particular way of thinking and processing. This means many things for emergent pedagogy.

First, individual and group thinking preferences provide specific information about how learners think and can assist with "scientifically informed decisions about instruction" (Riley, 2017) and curriculum development. Second, learners' awareness of personal thinking preferences and the problem solving process can increase their autonomy, motivation, and self-efficacy by enabling them to select specific tools and strategies for individually-defined success. Self-regulation, self-management and self-selection differentiates learning content, strategies, products and environments while simultaneously supporting Hammond's (2015) call for ways to develop independent learners who are self-motivated, engaged and responsible for their learning. Self-differentiation, then, provides greater promise for all learners. Likewise, it provides hope in successfully navigating the complex learning, working and living contexts we all may face in a post-Covid world.

Part Two: An invitation

Minimizing the familiar and maximizing the diverse: Emergent pedagogy in action

Neuroscience reveals the brain does not distinguish between the act of reading about an experience and the act of performing that experience. In both cases, the same areas of the brain ignite (Murphy, 2012). Although the brain may respond to static and active experiences in the same way, experiential learning creates embodied memories that enhance learning.

With this in mind, I invite readers to set aside their familiar expectations of academic articles and embrace the spirit of creativity, innovation and fun by participating in two, brief activities. Required is blank paper, something to write/draw with, and a timer. No artistic ability is needed, just an open mind and a sense of adventure. Ready? Follow the directions below.

Activity #1:

Give yourself one minute to draw, write or symbolize three culinary items you would bring to a party and provide point form reasons for your choices. When completed, put aside and get another sheet of paper for the next activity.

Activity #2:

Scan the image below

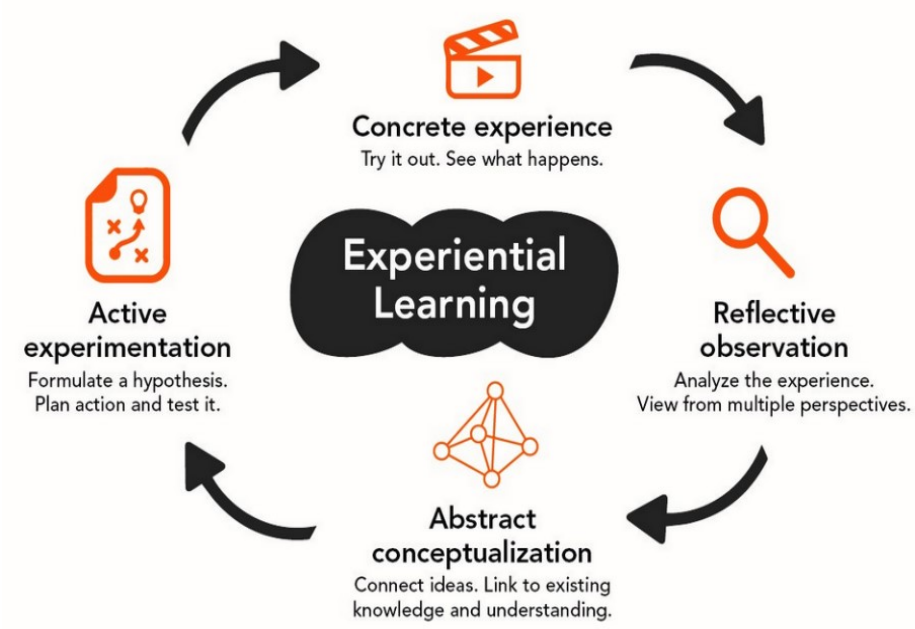
1. Set the timer for five minutes.
2. Within the set time, you will design a culinary event for these 35 people by writing, drawing, or symbolizing your ideas.

Do not read beyond this point until you have completed the above task.

3. Congratulations for completing steps 1-3. Give yourself a pat on the back.
4. Alas, new information has surfaced about the guests attending your event. Read the details below:
   - fourteen guests have various allergies, including a sensitivity to latex, and dietary restrictions requiring knowledge of your dishes' ingredients.
   - two have serious nut allergies.
   - eight are extreme foodies seeking novel and exotic culinary adventures.
   - six care about the environment, sustainability and the equitable production of food.
   - seven have to leave early to board a plane and require take out.
5. Mentally record your response to receiving this information. You may decide to end your participation, or continue on. Regardless of your decision, please continue reading.
6. If you decided to continue with the activity, set your timer for two minutes.
7. Within the set time, make modifications and adjustments to your event plan.
8. Thank you for participating in these activities.

3D-Briefing Activities

John Dewey states that learning does not happen through experience alone; learning comes from contemplating on the experience's significance in relation to past, present and future actions. Likewise, Kolb & Kolb (2018) emphasize the importance of reflecting on experience in order to connect that experience to prior and current knowledge (Image 2).



Retrieved from:
https://www.mohawkcollege.ca/employees/centre-for-teaching-learning/experiential-learning/experiential-learning-theory

To not reflect, especially on ice breakers, energizers and metaphorical activities, leads to missed opportunities, as well as potentially dysfunctional residual feelings. Since there is no such thing as just a game, 3D-briefing provides a three-dimensional exploration through three modest questions: What, So what, Now what. These three simple questions sequentially move from lower order thinking to higher order thinking in a way that is personalized, comprehensive, and contextual. It mirrors cognitive laddering (Bloom, 1956, Anderson, et. al., 2001) by identifying, analysing, evaluating and then creating future actions.

Drawing richness from the culinary metaphor, the following templates use 3D-Briefing prompts to explore what we did, why we did it, and how it might inform future actions. Since 3D-Briefing is a rich process, there are a series of questions to consider. The first 3D-Briefing asks about your designing of the culinary event in general.

3D-Briefing #1

What was your process for performing the task? List what you did first, second, third, etc.	*So what* was the significance of this process? Consider your strengths and challenges in completing the task?	*Now what* did you learn about your problem solving process that might impact your future problem solving?

The next 3D-Briefing asks you to reflect on a particular part of the design activity. Specifically, focus on what you did from the point you were aware of the guests distinct requirements – Steps 5 through 8.

3D-Briefing #2

What happened to your mood, energy, and attitude after receiving the information about the guests in Step 5?	*So what* might the significance of your responses be to the task?	*Now what* did you learn about how you handle new information that might impact your future actions?

The next 3D-Briefing asks you to consider your food preferences and how they might or might not have impacted your decisions in creating a culinary event for others. Once again, use the template to identify what you did to analyze the significance of those choices and then to see the impact this reflection may have on future events.

3D-Briefing #3

What items, if any, from activity #1 appeared in activity #2?	*So what* might be the significance of this?	*Now what* did you learn about yourself that might impact your future actions?

No doubt, planning a culinary event for 35 people can be exhilarating and challenging. There is much to consider and many ways to accomplish the task. The next 3D-Briefing invites you to consider the perspective you used to complete the task.

3D-Briefing #4

What perspective did you apply to the the culinary task from Steps 1-4? *What* perspective did you apply from Step 5-8?	*So what* was the significance of the perspective you used from Step 1-4 and then Step 5-8 to the design process, meeting the guests' needs, and the event's success?	*Now what* surprised you about the impact of perspective on design and how might the issue of perspective impact your designing of future events?

Are you surprised at the process you used to design the event? Activity #1 permitted your natural design tendencies to emerge which, may or may not have included various perspectives besides your own. The new information in Activity #2, steps 5-8, forced you to consider your design through multiple perspectives.

It is important to note that everyone who did the task succeeded and that there are lessons to be learned even if you didn't do the task. The following discussion is not about success or failure in planning a party; it is about recognizing the metaphorical connection between the culinary activity -- how we solve problems, the tools we use, the perspectives we take – and responding to a diverse educational ecosystem.

Part 3: Analysis of the "culinary event" activity

Minimizing the familiar and maximizing the diverse: Reflecting on emergent pedagogy

Let's acknowledge that inviting readers to perform an activity within an academic article is an unfamiliar practice. Some may have declined the offer; others, may have gone along with the game until Step 5 when given the opportunity to stop. Others may have jumped into the kettle all the way. To summarize the unusual request in Part 2: readers were invited to gather items needed for the activity. Next, participants were asked to write, draw or symbolize their favourite foods to take to a party. That was set aside and the next activity was based on a photo of 35 random people. These people were coming to a culinary event hosted and designed by the reader. After a few minutes of planning the event, readers were given new, detailed information about the guests. This information included allergies and other personal restrictions. Participants were given the option to continue with the activity, or not. An additional two minutes were given to make modifications and adjustments to

the design. Participants were then asked to reflect on their process, actions and deliverables through the 3D-Briefing model and to record their responses in provided templates.

An appetite for diversity

Designing curriculum that engages, motivates and meets the diverse needs of even more diverse learners is exciting, yet demanding, work. Too often, educators base curricular decisions on inaccurate, limited, or misleading information gleaned from superficial evidence. Class lists, visual impressions, anecdotes and assumptions tell educators little, to nothing, about who learners are, what they need to learn, and how they learn best. Using familiar perspectives or assumptions, educators make design choices overlooking details important for inclusivity, equity and diversity.

Wagner (2018) and others showcase the importance of diversity to innovation and creativity. Yorks and Kasl (2012) agree with this positive aspect, but recognize diversity's negative polarity, as well. They state that diversity, while highlighting novelty and difference, can challenge the creation of an empathetic perspective and block positive growth and transformation within classrooms (Yorks & Kasl, 2002).

Responsive educators need to minimize the negative impact of diversity and maximize its positive potential by recognizing the paradox within their own thinking process and how generalizations, labelling and profiling may reflect familiar, but untrue, assumptions about learning and learners.

Hammond (2015) comments on how many educators are poor judges of behaviour and label specific learners as unresponsive, unreachable, difficult and uncooperative. Educational decisions are based on limited, unreliable information, and inaccurate assumptions that fail to paint learners as individuals with distinct needs, passions, purposes, and learning preferences and styles. Just as the photo gave limited information about the dinner guests, curricular decisions are often based on external, unreliable evidence that obscures the individual. Then, when details surface, the paradox of diversity comes into play.

Every educator is a change agent; yet every educator has a choice between diversity's high potential for innovation and creativity, and its high potential for resistance and conflict. New information not aligning with our vision of the world can help us expand that vision. Yet, we must realize that "change challenges competence, creates confusion, and causes conflict" (Evan, 1996, p32). Timing is just one external factor influencing how we respond to diverse information. How might receiving the details about our guests at the beginning of the exercise, or being given more than two minutes to modify our plan, have altered our feelings and actions? If we felt a mild state of irritation after step 5 can we determine the cause? The information may have restricted our design freedom. Yet, ironically, restrictions can increase creative output by forcing divergent thinking on familiar, conventional solutions that are no longer appropriate, inclusive, equitable, or flexible options.

Earl (2003) states that finding out about students as learners and as people is the key to differentiated instruction. The more information we have about learners, even when it seems restrictive, or impossible to address, the more innovative education will be as educators think within and beyond the familiar box. A starting point may be asking how might we create innovative, quality curricular experiences for today's multi-faceted classrooms? One possible answer is to shift pedagogical perspective deliberately and realize education is not coated with Teflon. Education is impacted by global disease, political conflicts, social unrest, economic inequities, and more.

Accepting the creative challenge of minimizing the familiar and maximizing the diverse, responsive educators need agility in their pedagogical practices budding from an empathetic perspective. Central to human-centred design, empathy shifts the design focus on users, their needs, requirements, and knowledge in order to enhance their well-being, satisfaction, accessibility and sustainability. (ISO, 2019). Not content to just observe, human-centred designers employ ethnographic tools to understand the user from an insider perspective. In education, this means building relationships and a sense of community through which learners step out of the generalized profile.

The qualities of human-centred design also align with Outcomes-based Education, and Backward Design (Image 2). Outcomes-based education identifies the specific skills learners will be able to demonstrate at the end of their learning experience. Similarly, Backward Design stresses a learner-centred approach beginning with the skills and attitudes learners will achieve at the end of training. It concentrates on essential, transferable skills that can be applied to various learning contexts and mirrors the WEF's recommendations of transferable skills for robot-proofing the future. (2016, 2016b). While human-centred design is not linked specifically to Outcomes-based Education or Backward Design, it enriches the potential of both educational frameworks by introducing empathy as a way to understand and address the needs of learners. Again, Covid-19 has made such an empathetic framework paramount. Thus, combining these three frameworks makes for a powerful authentic and deliberate shift from teaching to learning, from product to process, from text to experience, from teacher to learner. This, creates a meaningful relationship between designers and users that is especially relevant in the educational landscape impacted by a global disruption such as Covid-19.

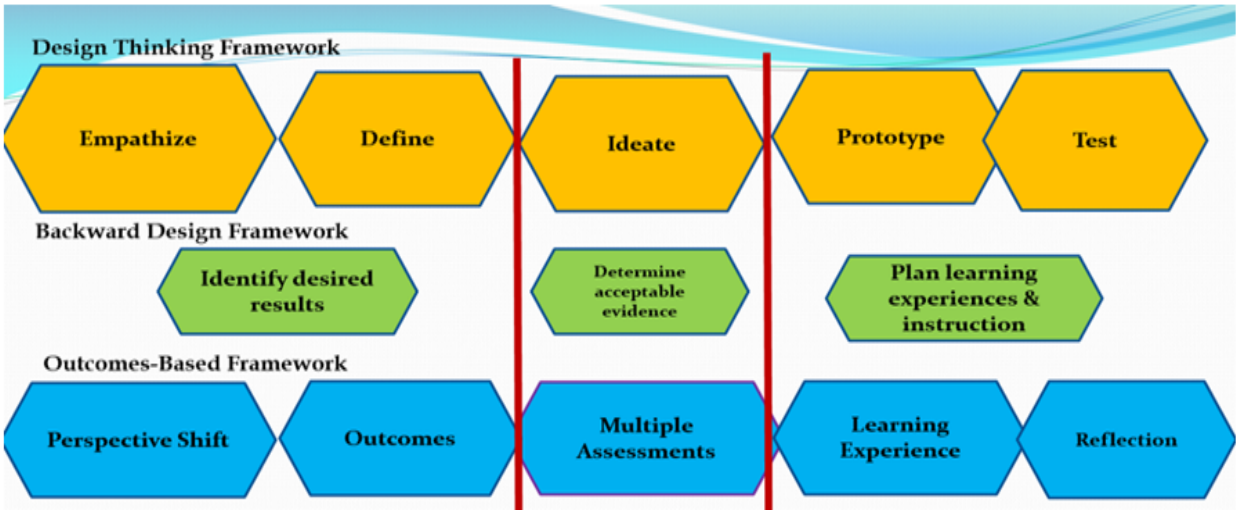


Image 2: Curriculum Design Thinking Framework

Designing curriculum from a human-centred, intuitive, cooperative, and creative manner requires an empathetic stance and knowledge of diverse situations and contexts. Best intentions, differentiation, empathetic perspectives and an emergent pedagogical stance do not guarantee an equitable response to diversity (Reis & Renzulli, 2018). It was impossible to anticipate all the accommodations required in our culinary activity. Likewise, an education system interrupted by a global pandemic was unimaginable. So what is the solution?

Remember the ancient proverb:

> Give a person a fish they eat for a day. Teach a person to fish and they eat for a life time.

As responsive educators, designing flexibility and independence into learning experiences empowers learners to apply appropriate tools and concepts to their own situations. Teaching transferable processes, tools and strategies empowers them for all occasions and builds their sense of ownership and accountability by placing them in a position of strength rather than a position of inequity and weakness (Hammond, 2015, Reis & Renzulli, 2018, Tomlinson & Moon, 2013).

Divergent thinking, or brainstorming, is key in minimizing the familiar and maximizing the diverse. It is an important ingredient in equitable curriculum design, especially when familiar teaching and learning strategies may not be available due to safety concerns, nor sufficient in meeting learner

needs, or ambiguous contexts, such as what the world experienced in 2020. As a way of generating novel options, it also enables learners/educators to shift perspective and empathize with diverse views and scenarios. But, brainstorming is not a cognitive free-for-all. There are rules of engagement:

- Avoid censoring, or judging, ideas. Anything is possible, everything is valid, all ideas are recorded;
- Aim for quantity by listing all ideas that come to mind and by not listening to the reality checker in your head;
- Build on ideas through substitutions, associations, modifications, opposites and clustering;
- Follow wild, novel and unique ideas that defy reality, gravity and logic; and,
- Respect the idea, especially if doing a group brainstorming, by accepting anything and everything as a valid and possible contribution.

While divergent thinking creates options and possibilities, its counterbalance ensures that ideas are based on criteria relating to the challenge at hand. Convergent thinking seeks to balance the creative potential generated by divergent thinking with workable solutions. Once criteria are set that matches the task, the rules around ranking ideas create this equilibrium:

- Avoid snap judgments based on prejudices, assumptions and fears;
- Remain constructive and positive about ideas;
- Adjust and modify ideas;
- Be courageous and don't shy away from novelty; and,
- Remain true to the objectives.

How might the application of divergent thinking in Activity #2 have helped you prepare a culinary plan that met the needs of most guests? As already mentioned, divergent thinking is essential for innovation and creative thinking. It challenges the ideal learner profile based on conventional characteristics, attitudes and attributes and suggests an empathetic exploration from multiple perspectives and lenses.

What type of thinking did you use to design the event?	*So what* is the significance of this type of thinking to a user-centred focus?	*Now what* ways might divergent and convergent thinking assist in your teaching and learning practices?

Like our culinary activity, the current educational table must serve multiple tastes and needs. Differentiated learning sets the table for individuals to fill their own plate with familiar as well as new options. Giving learners transferable tools, such as divergent-convergent thinking, creative problem solving, to fill their own plate with familiar and new learning selections is an innovative, viable option. Providing a secure framework for learning, institutions and educators must not be blind to society's rapidly changing, uncertain, and complex demands. Such blindness will maximize resistance and conflict and minimize innovation, creativity and empathy.

Conclusion

Unlike learners and educators during the Covid-19 pandemic, readers were given a choice to engage in the interactive activity or not. A second choice was given during the activity: respond to the guests' heterogeneous needs, or ignore those differences. Today's challenging educational ecosystem means all educators must be responsive to learners cultural, economic, geographical, psychological and physical needs. An educational environment impacted by a global health crisis must reject the conventional perspective that designs curriculum for an imagined, ideal learner. She no longer exists, if she ever did.

The metaphorical activity reflects the various challenges in curriculum design, minimizing the familiar, maximizing the diverse, and differentiated learning experiences. Designing and learning

involves choice. How responsive, equitable and empathetic we are *was* also a choice until March 2020. Rather than viewing learner diversity as a hindrance or an impossible challenge, educators need to provide learners with transferable concepts, tools and strategies for self-guided differentiation making them independent designers of their own future.

The reins of learning must be given to learners so they can develop an independent mindset. Awareness of processes and paradoxes empowers learners to self-differentiate learning and become independent learners where self-motivation, autonomy and confidence grow through the application of tools and learning strategies best suited to the learner's own needs and learning styles (Hammond, 2015).

In the spirit of emergent pedagogy, I invite you to consider the final 3D-Briefing cluster. Practice divergent thinking when answering so that you can choose the nutrients you need to be a responsive educator setting an equitable, empowered learning table for all.

What were you asked to do in this paper?	*So what* are the ways this relates to how you design curriculum?	*Now what* might you learn from these connections that may impact your actions in a post-Covid world?

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Christine Boyko-Head is an artist-educator specializing in innovative curriculum development, arts-based integration, creativity and personal development through the arts. She earned her Ph.D. in English Literature from McMaster University. She is certified as a Foursight Thinking Preference, and Design Thinking facilitator and a Values Institute intercultural competency auditor. She founded a theatre company creating social justice plays for young audiences, helped start a national magazine for/by young people, converted her Ph.D. dissertation into a historical fiction and fund raised or $1.3m for her community. Her interests swirl around minimizing the familiar in order to give voice to the diverse. She has published, taught and presented nationally and internationally with a focus on developing equitable, empathetic collaborative experiences. Her new venture, Kaleidoscope Learning Solutions, amplifies creativity as a way to help educators think differently, learn flexibly and live creatively. She teaches at Mohawk College, Canada and lives on the shores of Lake Erie in Southern Ontario.

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