

A Publication of Informal Learning Experiences, inc


Inside: The Museum World Confronts the CURRENT ENVRIONMENT
Plus: What is the New Normal, The Future is too Early to Predict, a Good Bad Year Continues, AND MULTIPLE ASSESSMENTS AND OUTCOMES.

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## INTRODUCTION

This is indeed an interesting time for us in the museum/science center world. Perhaps "interesting" isn't the best word to describe the challenges, changes, convolutions, catastrophes and celebrations that have demanded our attention for the past many months. And here in The Informal Learning Review, once again a diverse group of people have come forward with their thoughts, experiences, concerns, etc. for us all to contemplate. In many ways, as demonstrated in the commentaries to follow, the changes and stresses imposed by the pandemic and its consequences have necessitated organizational, financial, programmatic and other changes that likely would not have occurred - at least right now. Thus we can accept the very useful statements of Winston Churchill: "Never let a good crisis go to waste."; "If you're going through hell, keep going"; "To improve is to change, so to be perfect is to change often."; "It is wonderful what great strides can be made when there is a resolute purpose behind them."; and "A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty"

AS time passes I continue to use the metaphor of biological evolution as a framework for the issues and events of the 2020s. With my academic and research background in paleontology I have spent significant time figuring out who lived when and where and how it was that the changes documented in the fossil and geologic records occurred with some organisms succeeding and diversifying and others disappearing. The example of the extinction of the nonavian dinosaurs about 66 million years ago as a result of a huge asteroid-like object hitting Mexico and causing worldwide severe environmental disruptions followed by the success of mammals thereafter is hard to dispute.

Therefore I do like the array of Churchill quotes, most of which give confidence that change, even if unexpected and undesired, will have a positive outcome and the world of museums and science centers, while it will be different in perhaps unpredictable ways, will be serving our world better and providing assets that have not been previously available.

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## S U B S C R I P T I O N I N F O R M A T I O N

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## LOOKING AHEAD - A SHORT DISTANCE

## By Robert Mac West

Issue 170 of the Informal Learning Review will be a commemoration of the $26+$ years of our publication. It will include portions of article that we have published that can be regarded as having some level of significance, especially now when we are so engaged in the abrupt and often unpredictable transformation of our industry. It also will celebrate that many authors and their institutions/organizations that have provided us with opinions, interpretations and reports.

As this issue, which will be published before the end of 2021, is prepared, we at ILE are seeking readers' recommendations of articles, ideas, and presentations that were timely at their time, predictive, characteristics of the individual authors, and basically interesting. Thus it will be very helpful for you to provide us with your thoughts and suggestion for this commemorative issue before the Thanksgiving holiday weekend - e.g., by the 22nd of November.

## Museums Becoming Essential

By Karen Ackerman Witter

COVID-19 is a continuing menace, but a much different situation from when COVID first rocked our world. We shouldn't be in this situation now. Public health experts routinely say COVID cases will continue to surge as long as large numbers of people are unvaccinated. Our country is deeply divided. Partisanship dominates nearly everything. Simple facecloths have become political. There is no indication partisanship will subside anytime soon. As widely trusted, non-partisan institutions grounded in authenticity, history and science, museums are more important than ever. Museums can and should be inclusive and welcoming, a place for social discourse and a bridge to a more united citizenry. To do so, museums must be engaged with the communities they serve.

In May 2020 I wrote about the need for museums to "become essential" and be deeply engaged with their communities in order to survive the pandemic. Now, I am reflecting on how one small, start-up museum in Springfield, Illinois has toiled to do that. The Kidzeum of Health and Science was founded in 2018 to provide experiences of learning and discovery through play for children of all backgrounds and abilities. This start-up museum was popular with families with young children, but struggled to become financially sustainable with broader-based community investment.

Kidzeum's leadership believed stronger community partnerships were vital to the museum's long-term success. They continued to explore this potential, while concurrently applying for COVID-19 relief funding and other
grants. Kidzeum received federal PPP funding, an SBA loan and $\$ 150,000$ state Business Interruption Grant. These infusions of cash kept the museum afloat. Kidzeum took advantage of this runway to pursue stronger community partnerships.

Credit goes to Springfield's Superintendent of Schools for continuing to address long-term goals while facing the immediate challenges of the COVID-19 crisis. Improving elementary students' science scores is a priority. The superintendent embraced the opportunity to partner with Kidzeum to bring cohorts of second grade students to the Kidzeum for an immersive two-week STEAM program during the 2021-2022 school year. The program will launch later this fall. The business community and school district are already partnering to enhance high school level STEM education. This initiative is designed to strengthen the STEM education pipeline in the early grades.

By embedding Kidzeum in Springfield's educational infrastructure, there are greater opportunities for financial sustainability. It is too early to know how this will play out. However, Kidzeum is on a pathway for success. Kidzeum received an IMLS Inspire grant for small museums to support this partnership, a Kappa Delta Sorority Foundation grant to provide innovative educational materials and other programmatic grants from diverse sources. This is one example of how a small, struggling, start-up museum has worked to become essential to its community. Key to this has been bold and outstanding leadership by a highly committed executive director working with an
extremely engaged, knowledgeable and dedicated board of directors. Leadership, perseverance, communication with community leaders and shared vision and commitment among the board and C.E.O. are essential elements for museums to become essential in their communities.

Karen Ackerman Witter is former Associate Director of the Illinois State Museum and immediate past president of the Kidzeum. She may be reached at kawitter13@gmail.com.

## Museums as Pathways to a Better Future

## By Mark Walhimer

## INTRODUCTION

The United States (and maybe the world) is at a tipping point. Do we continue on our current path of apathy, or do we acknowledge our past and our potential future and make fundamental changes to how we live, work, and interact?

## CLIMATE CHANGE

This last summer has made it dramatically clear that climate change is causing extreme weather for which we are ill-prepared. The recent United Nations report flashed a code red warning light that we only have a few years to make changes to our behavior in order to maintain current conditions before they further deteriorate.

## NATURE OF WORK

COVID-19 has changed the way we work and live, and has forever changed museums. This is only the beginning of the changes to the nature of work; with automation, artificial intelligence, and global supply chains, work will be dramatically different in the near future. Economic inequality shows the dangers of ever-expanding capitalism without civil societal boundaries resulting in culture wars, as seen with resistance to COVID-19 vaccines.

## CHANGING CIVIL SOCIETY, ETHICS, AND MORES

The United States (and maybe the world) is moving toward an authoritarian fundamentalist future. This summer, we
witnessed China refuse the WHO investigation into the beginning of the COVID-19 pandemic. We witnessed a humanitarian crisis in Afghanistan and the Black Lives Matter protests. We witnessed attacks on critical race theory and the scientific community. Russia and China are on the ascent, and the easier path is to follow instead of lead. Museums and the people who work in museums have an opportunity to redirect the pathway to a hopeful collective future.

## CONCLUSION

Museums have an active and important role to play in a more hopeful future. Together, museums and communities can work to counteract climate change, to train and prepare people for the new nature of work, and to be places of ethical and philosophical responsibility, building souls for our new future.

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# Nuclear Museum Emerges from a Dark Covid Winter to a Bright Future 

By Jim Walther

Well, it has been a trying time indeed. I remember writing you as we plunged into being closed to the public and then as we sent our staff to work from home. What would happen? How would the museum survive it? We did apply for and receive 2 PPP loans and we adjusted our output as well as costs. With care and good oversight plus hard work, we made it.

The National Museum of Nuclear Science came through the earlier part of the pandemic in flying colors despite a small RIF and closure for 6 months. I am not sure it is over yet. We appear to have gained back all we lost financially through this past summer travel season and our summer camp was $100 \%$ booked and very successful. If I had to speculate on impact, I would say that the pandemic re-aligned our staffing team, our products and services offerings and our customer services practices to better meet future challenges. It appears our coming FY2022 budget will be an increase over FY2019, so we have roared back after this troubling and deadly time for so many people and institutions.

Our team here is the reason we succeeded. Both staff and Board came together in support of new dimensions of
effort, new and creative ways to view challenge and meet objectives. And our volunteers, diminished as a force by the pandemic, but still supportive, made a big difference. Our public responded to our needs as well. Local as well as national support increased, and our virtual Nuclear Science Week 2021 event that was seen on social media achieved 52M impressions.

It is the new normal, in my opinion; a hybridized version of engagement and reach that I feel really can benefit the institution as one with a national presence. If we as an institution can remain connected globally, we can gain more support and reach a larger audience as well as attract strong visitation. The pandemic made us stronger and certainly more resilient as an institution and a work-force.

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Nuclear Science and History, Albuquerque, New Mexi-
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# Would Your Museum Make an Honor Roll or the Endangered Species List? 

By Charlie Walter

The Mayborn Museum, where I serve as Director, is a Department of Baylor University. On September 13th of this year, in the midst of the pandemic's resurgence, university officials announced that for the 10th time, Baylor had attained elite Honor Roll status as a 2021 Great College to Work For ${ }^{1}$. Of 196 colleges and universities, Baylor is among only 42 institutions named to the Honor Roll. Baylor was cited for special recognition in six categories:

- Job Satisfaction \& Support: Satisfaction with job fit, autonomy and resources, which are essential to an
engaged workforce.
- Compensation \& Benefits: Fair compensation and benefits play an important role in employees feeling valued and respected.
- Supervisor/Department Chair Effectiveness: Managers provide clear direction and constructive feedback, ensuring effective communication and equitable treatment.
- Confidence in Senior Leadership: Faculty and staff expressed confidence in the capabilities and credibility of senior leadership, including the president and direct
reports.
- Mission \& Pride: Understanding an institution's mission and how one's job impacts that mission drive faculty/ staff engagement, level of pride in being associated with the institution and the willingness to recommend the institution as an employer.
- Faculty \& Staff Well-being: Impact of one's employment experience on their well-being, such as the opportunity to do meaningful work, the support for work/life balance and the experience of a safe working environment ${ }^{2}$.

Most of my museum colleagues have dealt with the COVID-related issues of layoffs, PPP and Shuttered Venue loans, and streamlining operations as we slowly come out of the pandemic. I have felt guilty at times seeing how hard this pandemic has been on them and their staff. While Baylor University did face budget cuts, my museum, being part of the Provosts Office and the academic mission of the university, was impacted minimally. Our budget was cut but ultimately restored. Our revenues did not match expectations, but the university made up for our shortfall. My staff received free weekly COVID tests, and when the vaccine became available, the university prioritized vaccinations by health risk and age, and all staff who wanted it received the vaccine.

All of this preamble is to just make the point that museums that are part of a larger system, such as a university or government entity, probably fared better than stand-alone 501c3 corporations during the pandemic. Those of you who now have your PPP loans and Shuttered Venue grants in place may be smiling and thinking you made out pretty well after all. But what about the staff you laid off before these grants and loans became available? What about the programs you cut from your operations? What about the uncertainty your staff are now feeling because of this fragility? If your museum participated in an honor roll survey, would you make the honor roll list? What would your staff say about job satisfaction and benefits? What would they say about confidence in your Board and Senior Leadership? Would they show pride in the institution? What would they say about how much they feel supported as far as work/life balance?

This pandemic may just be one of an increasing number of VUCA ${ }^{3}$ episodes that mark a global shift in our operating environments. Mac West has told me many times that museums must evolve to meet community needs. Those that do not could face extinction. As our operating environments become more volatile, perhaps the long-term health of stand alone 501c3 museums will continue to suffer? As someone who worked in a stand-alone museum for 25 years, I can tell you that I have felt much more
secure in both a university and state-run museum. State government and university administration can be challenging to deal with at times, but there is real strength in knowing a state law created your museum or that the university values you for your work in student learning and community engagement with current research.

In September of 2020 after five months of closure, Mayborn Museum employees were asked to provide feedback to the museum and university related to their COVID experience as part of an annual staff survey. The following comment was mirrored by many:

## Baylor University and the Mayborn Museum went above

 and beyond to keep us safe, informed and *employed* during an absolutely unforeseen crisis. Not many other places were able to do that. I believe the value the Mayborn Museum placed on its employees speaks volume, and for that I feel we should all give $110 \%$ back to safely rebuild our visitor base. With online content, virtual, hybrid, and in-person programming, we can still successfully meet our goals. ${ }^{4}$As I'm sitting here reflecting on our field's COVID experience, I can't help but wonder how many stand-alone museums are destined for an endangered "species" list. Perhaps many museums will evolve into something different in order to survive? I know of one museum that leased much of its space to a school district for their use. Another has applied for charter school status. And yet another has moved into one building which is also occupied by a library and a community center. Exploring mergers and partnerships that can make both the museum and the partner/ host stronger is one strategy to survive our increasingly VUCA world. Our staff and our communities deserve every effort we can make to move away from the endangered list and towards honor roll status.

## ENDNOTES

${ }^{1}$ https://greatcollegesprogram.com/list/
${ }^{2}$ Baylor University Media and Public Relations
${ }^{3}$ Volatility, Uncertainty, Complexity, Ambiguity. Thank you, Marsha Semmel, for your wonderful article in the ILR Special Issue 2020 \#2
${ }^{4}$ Mayborn Museum 2020 Staff Survey

Charlie Walter is the Director of the Mayborn Museum Complex of Baylor University, Waco, Texas. He may be reached at Charles walter@baylor.edu.

## NOT YOUR EVERYDAY NORMAL

## By Jeanne W. Vergeront

Museums are looking at a new normal that has long been before our eyes but we haven't yet seen: the certainty of uncertainty and successive disruptions that unmistakably impact our museums, our lives, and our communities. Over the last few decades, we've experienced a terrorist attack, a recession, a pandemic, hurricanes and wildfires, and multiple technological disruptions. We've viewed these as exceptions, named them individually, and moved on, often finding ourselves under-prepared for what came next.

A decade ago, we focused on opportunities. Now, we talk about challenges. In 18 months, museums have closed temporarily, repeatedly, and permanently. They laid off, reorganized, and rehired staff. Programs have been dropped, added, and adapted to on-line formats. Museums have been frugal, used reserves, and managed with relief funds. They have stepped into new roles, extended helping hands, and reaffirmed their purpose.

This is not your everyday normal.
While change has always been a reality, large-scale, rapid change from aging infrastructure, social unrest and rising expectations, epidemics and pandemics, and cli-mate-change related environmental events has become the animating force of our everyday lives.

What is becoming our everyday normal doesn't determine our future, but it is a call to action to be poised for more challenges, positioned for new opportunities, and prepared for business as unusual. Museums can anticipate and prepare for both incremental change and major disruptions before the next crisis by:

## Becoming more-informed about real and possible risks

Because knowing what to expect helps with preparation:

- Consolidate what the museum has learned from previous disruptions including what and how other organizations, both local and regional, have learned from disruptions.
- Learn from experts about potential disasters that might impact the museum.
- Look critically at the museum's location, facility, and grounds using new information.

Increasing internal capacity to cope with adversity. Early and on-going planning is necessary to weather hard times.

Invest by:

- Determining needed museum infrastructure and systems upgrades to withstand likely disruptions;
- Identify at-risk assets;
- Integrating everyday choices into disaster planning across the museum;
- Exploring development of a disaster fund to draw on during emergencies.

Working with new friends and partners. If the museum lacks expertise to assess risk or play a larger role around environmental issues, access special expertise by:

- Working with local, state, and federal agencies such as FEMA to improve preparations;
- Developing an emergency response plan;
- Work collaboratively with hospitals, universities, local non-profits, and museum associations to prepare to meet new challenges.

Finding optimism and hope through the museum's work. Museums help themselves, their communities, and others with new, current knowledge, powerful missions, and the possibilities of change by developing:

- A deeper understanding of resilience and the protective factors at multiple scales that assist us all in surviving, recovering, and thriving;
- A resiliency framework to help minimize setbacks and adapt successfully to disturbances; (https://museum-notes.blogspot.com/2021/08/resilience-what-do-wemean.html)
- And always investing in the well-being of museum staff and volunteers.

[^0]
## Head in the Sand

By Barry Van Deman

We are all weary of covering our faces and wondering what it means to be safe. We are weary of the uncertainty of what the future holds and how we respond. Yet somehow, most of our organizations survived these many months. We survived.

The impact on our organizations has been harsh-even devastating for some. We lost team members. We struggled with the right decisions. Our resources were depleted. Now, between COVID-19 and its variants, we are in a race to make up for lost ground before the next variant strikes. We prepare for whatever comes next. The glass-half-empty crowd has had enough; the glass-half-full survivors among us see a future beyond the pandemic.

Through it all, we have learned. We learned that the unexpected can happen. The disruption of our entire business model can happen with ferocity, like the winds of a hurricane, or creep up on us, slowly at first and then pounce before we are able to respond. Some among us had the foresight to prepare for the rainy days. We either had the resources to survive or not. We pledged to keep more cash reserves if only we could weather the storm.

We were damn lucky. PPP loans saved us.

We were smart but discovered our weaknesses. We discovered that we could spring into action. Some team members surprised us with their dedication, sacrifice, and talent. Others disappointed us. Sometimes, we were disappointed in ourselves.

We learned that we were capable of more than we could have imagined. Our teams rose to the challenge, put in the extra hours, achieved things they never did before. We were in awe of what our teams could do. Did we ever imagine that they had these skills, this talent? Did we ever pay enough attention?

We found that great cultures survived the pandemic better than less-than-great cultures. We appreciated the people who made it all work, and we learned to say so.

We learned that the relationships we have with each other matter more than the structures and systems of our organizations. Over Zoom, we invited each other into our homes - cats crossing atop of our keyboards and dogs and children running across our screens. We saw each other dressed casually from the waist up and never bothering to
see if we wore pants. And what did we learn? We learned to pay more attention to lives that are more than work lives, to a culture that is based on mutual caring, respect, and acceptance of each other.

We learned that our organizations are either transactional or relational, or more one than another. We closed our buildings and people missed us, but for many, the loss wasn't more than the feeling of loss they had for the mall. Some didn't miss us because they didn't have a relationship with us. We said we were necessary, but did they believe it? Did we believe it?

We had an epiphany. Our role as an organization was changing. We became too comfortable and assured of our role-at least too comfortable to recognize that society was changing and we needed to change. We succumbed to our darkest fears: we were nice, not necessary. We risked becoming irrelevant.

Of course, there is a counter point of view: things will return to normal. Our new normal will resemble the pre-COVID normal. Perhaps life will return to normal, unchanged by the pandemic. But I would like to suggest that just because we can return to a previous state doesn't mean that we should.

In a sense, we have been given a gift to think differently. Before other forms of disruption descend upon us, can we reimagine the future? It's time to pull our heads out of the sand and invent the future. We owe it to the people we serve and to the people who work alongside us. We owe it to ourselves.

Barry Van Deman is Executive Director of the El Paso Children's Museum and Science Center (working
title), El Paso, Texas, opening in late 2022. He may be reached at barryvandeman@gmail.com.

# OLDER ADULTS: A STRATEGIC OPPORTUNITY 

By David A. Ucko

In chemistry, a catalyst lowers the "activation energy," making it easier for a reaction to occur. The COVID-19 pandemic can play an analogous role for institutions that may be averse to change under more normal circumstances. The disruption created in "business as usual" provides a rationale and opportunity for boards and staff to review fundamental questions that might otherwise not have been considered.

One critical issue that should be re-examined is the priority of audiences to be served. Recent attention has appropriately been focused on increasing diversity and the significant need for greater inclusion. Less attention has been given to the dramatic change in age distribution. For the first time in U.S. history, older adults are projected to outnumber those under 18, as the last of the boomer cohort turns 65 in 2030. A similar trend can be observed in other developed nations, most notably in Japan and Europe. This population shift is especially relevant for institutions with a primary focus on children and youth, whose numbers are in decline.

Institutions have been slow to address the demographic transition underway. As a result, older adults are outliers in most museums today. A few have begun to offer participatory arts programs under the heading of "creative aging" or programs targeting adults with dementia. These are steps in the right direction, but museums can play an even greater role by responding directly to the overwhelming desire of older adults to slow cognitive decline.

Through a series of epidemiological and neuroscience studies, researchers have found that forms of cognitive engagement, such as those offered by museum experiences,
can reduce the risk of dementia. By increasing "cognitive reserve," they can enhance brain resilience and mitigate or compensate for the effects of decline. To best apply these findings, museums should consider creating targeted programs in partnership with university and medical school faculty having expertise in cognitive neuroscience and gerontology, along with the learning sciences, psychology, and related disciplines. Factors to be considered include imparting new knowledge and skills, challenging older adults within the range of their capabilities, encouraging social interaction, and offering novelty in the types of cognitive stimulation. A forthcoming article (Ucko 2022) provides further background and guidance on promoting healthy cognitive aging.

The growing body of neuroscience research presents museums with a strategic opportunity to serve as sites for "public health intervention" that specifically focus on addressing the increasing personal and societal challenges of cognitive decline. In response, museums will gain access to a rapidly expanding, largely untapped audience of older adults while further expanding their community impact.

## REFERENCE

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# Americans Want Arts and Culture Organizations to Change 

By Madeline Smith

If there's a silver lining to the past year plus of COVID-related disruptions in the arts and culture sector, it's that disruption can be a catalyst for much-needed change. The
national Culture + Community research I've been working on throughout the pandemic illuminates important opportunities for arts and culture organizations to become more
relevant to, and reflective of, their communities.
In our two-year study, we've found that the desire for arts and culture organizations to change is both widespread and rising. As of May 2021, more than half of Americans (53\%) hope organizations will change to be more relevant to more people, a near doubling from the early days of the pandemic when just $30 \%$ indicated a desire for change. Interestingly, this increased desire for change tracks with an increase in assessment of the importance of arts and culture organizations (over the course of the first year of the pandemic, Americans increased their valuation of arts and culture organizations by $16 \%$ ). This increase could indicate that Americans value and rely on the arts and culture sector more during times of crisis, yet still want organizations to evolve and become more inclusive and representative of their communities.

Given the increased visibility of movements for racial justice, voting rights, and equity, we also wanted to know what kinds of roles (if any) Americans want arts and culture organizations to play in social change. Remarkably, more than three-quarters ( $76 \%$ ) of Americans believe that
arts and culture organizations should be tackling at least one of the social issues we asked about on the survey. Systemic racial injustice was the issue most people wanted organizations to address at $41 \%$, followed by income inequality/the wealth gap, and climate change, both at $31 \%$. Addressing social issues could mean drawing awareness to, increasing knowledge around, and facilitating conversations about things affecting individual communities and the nation as a whole. Whatever their role, Americans are telling us that arts and culture organizations can, and should, positively impact their lives and truly benefit society in desperately needed ways-if these organizations are willing to make some hard but necessary changes. I hope they listen.

Madeline Smith is Project Director \& Research Operations Lead at Slover Linett Audience Research in Chicago, IL. She can be reached at madeline@sloverlinett.com.

## REsponding to the VUCA World

By Marsha L. Semmel

Last year, I wrote in ILR about "Leading in a VUCA World", with VUCA standing for Volatile, Uncertain, Complex, and Ambiguous. The term, coined by the U.S. military decades ago, has since migrated through the for- and non-profit sectors. I described leadership skills and mindsets needed by all museum staff to address the uncertainties and challenges posed by the "nested crises" of the COVID-19 virus and the overdue national reckoning with systemic racism put in high relief by the murders of Ahmad Arbry, Breonna Taylor, George Floyd, and too many others. In the ensuing months, we've encountered the Delta variant and the refusal of a sizeable portion of our population to become vaccinated; we've endured massive floods, spreading wildfires, and the hottest summer on record; we've documented the greatest number of recorded hate crimes since 2001; and we've witnessed an insurrection at the U.S. Capitol.

Although I'm no longer a museum staffer or a federal cultural agency representative, in the past year l've taken the pulse of the field through conversations with well
over fifty museum professionals in different disciplines and in various stages of their careers. I've been deeply immersed in current political, cultural, and social issues and their impact throughout museums, the academy, nonprofits, and the corporate world. I'm more convinced than ever that many of our "normal" practices and principles need a major overhaul. Our VUCA status requires cultivating an adaptive response to today's uncertainties. And that adaptability needs to be accompanied by actions, with change from the inside out. We must question many aspects of a "normal" museum model-even the very definition of a museum--from hierarchical structures to leadership to program topics and formats and visitor experiences. We need to cast fresh and critical lenses on the assumptions that underlie just about everything we do. We need to address our colonial, racist, and exclusionary practices. We need interrogate our purpose and goals. We need to take an active and ethical stance in response to today's pressing issues, from threats to the planet to threats to democracy. Where do we stand, really stand, on systemic racism? Where do we stand on telling the
full, unvarnished stories of our past? Whose voices do we feature in our spaces, and whose do we omit? How do we address the hopes, aspirations, and needs of our publics? How has our reliance on only certain types of expertiseto the exclusion of other perspectives and knowledge--led us astray? What canons need to be exploded? What kind of support, healing, and concern do we owe our staff? How must we revise standard personnel practices that often provide limited pathways for the voices, agency, adequate compensation, and advancement of junior staff?

In Joshua Cohen's recent novel, The Netanyahus, (New York Review of Books, 2021), the narrator, a history professor named Ruben Blum, reflects on growing up in the Bronx, where the building that once served as the synagogue of his youth is now the Church of the Assumption. He notes that "the church's strange appellation gradually became a kind of private joke or personal pun for whenever anyone presumed upon my Jewishness, or presumed to prevail upon me by appealing to my Jewishness." (p.27). In other words, Blum mentally makes "church members" of anyone who too quickly defaults to unsubstantiated assump-
tions-about religion, politics, ethnic groups, or specific individuals. Through the trope, he humorously warns us about how many misinterpretations are based, without evidence, on our superficial and stereotyped assumptions. I think that we in the museum sector have too often trafficked in our own unsubstantiated assumptions: about our centrality in the world, our accessibility to potential audiences, our "best practices," and our significant public value and impact. The disruptions of the past year signal that we cannot return to any previous "normal." We need to move into the future with a fearless and fierce dedication to upend our outdated traditions and conventions and thereby seek to make our places of work-and our society -- a better place for all of us.

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## WHAT IS THE 'NEW NORMAL MUSEUM'?

By Tory Schendel

When museums shut their doors in March 2020, museum professionals had to cultivate and maintain a virtual presence to remain relevant. However, over a year later, the museum field is situated between the physical and the vir-tual-especially since we are still combating the coronavirus. Due to this, I believe we are experiencing the New Normal Museum. In my organization, the New Normal Museum is a multi-access platform that fosters organic community engagement. Specifically, the Department of Art has created an international internship program where students from the Middle East, the United Kingdom, and cross-country have conducted original research on the permanent collection and have created exhibitions at the Museum. By expanding our internship perimeter, the Department of Art has been able to serve a greater global community, which has positively impacted our local physical operations.

After two students from Muscat, Oman completed their virtual internship, an opportunity presented itself in which the students were able to physically come to the Evansville Museum for two weeks. They were able to build on their virtual experience and gain new collections knowledge by assisting the Curator of Art on a preventative care project
for the Archaeology collection. Another example of positive physical impact, a team of students from the Johns Hopkins University, who live in California, Texas, Pennsylvania, Indiana, and Maryland, virtually wrote an exhibition titled, Justice: Mesopotamian Heritage and Modern Interpretations and will physically come to the Museum in October 2021 to install the exhibition. Additionally, from the local community discussion surrounding the Middle Eastern influences of the Justice exhibition, the Museum was awarded a community grant from the Efroymson Family Fund to create an exhibition titled Cultural Communications in 2022. Cultural Communications is a physical community installation that focuses on highlighting the Muslim, Black, and Latino populations in Evansville.

If the Evansville Museum never opened its virtual doors, none of these opportunities would have come to fruition. The New Normal Museum at the Evansville Museum will continue to work globally to impact locally.

[^1]
## FOLLOW THE MONEY TO THE FUTURE

By Stephanie Ratcliffe

What we have learned about our business and funding models in our COVID induced upside-down world prompts some very interesting reflections about funding models for our field. What and who really saved us in this crisis? What was revealed about our assumptions and practices so we can discard pre-COVID thinking making room for the new?

Many museums were the recipient of critical Federal government support that kept the lights on, paid staff and allowed us to continue to deliver programs and mission. Compared to other private sector bailouts this was a drop in the bucket of the one trillion dollar U.S. Federal COVID relief. It was encouraging to see lawmakers understand the essential and trusted role of museums and nonprofits by supporting us in this crisis moment. Yes, we will continue to earn revenue in support of our activities but can we also dream of more ongoing Federal support of basic operating expenses? If we can build on this moment of endorsement and recognition from lawmakers we can shift dependence from the endless programmatic Hunger Games grant churn demanded by private foundations and Federal museum funding opportunities. Rather than pitting us against each other in grant competitions, why not continually support the sector so that we can continue to be community anchors while at the same time delivering economic benefits.

True friends are there for you in the good times and the bad. It was truly heartwarming to hear so many accounts of the best fundraising years ever. What does this say about the fundraising activities we have habitually assumed was needed to garner these dollars? And what about that Gala treadmill--if our supporters were willing to literally phone it in while wearing sweatpants and slippers,
do we really still need this old school exclusive fundraising tactic?

The rapid shift to virtual program delivery showed us how incredibly fast staff can adapt and learn but it also forced us into new expansions with no business model to support it. It is clear that the public assumes these offerings should be free and openly accessible. While all our passion is in sync with this sentiment, our business models don't fundamentally support it without specified funding or tucked under the rationale of a marketing expense. The wider accessibility of virtual offerings can solve so many aspirations around our DEAI and commitment to informal lifelong learning. It would be a shame to walk back these new initiatives simply because we can't figure out how to pay for it when the world returns to some new normal and we no longer have the staff capacity to execute at the same level. Assuming we accept the desired free for all assumption and without an obvious new source of ongoing funding, what will we stop doing so we can absorb these costs?

Learning from adversity can show us new options and paths forward. What did you see with new eyes about our field's funding and business model assumptions? What gets me out of bed at the moment is the reset opportunity before us.

> Stephanie Ratcliffe is the Executive Director of The Wild Center in Tupper Lake, New York. She may be reached at sratcliffe@wildcenter.org.

# The Future of Museums: The Post-Pandemic Ripple EfFect 

## By Amparo Leyman Pino

I consider myself an optimistic, looking for the silver lining, the assets, the learning, the morale. The pandemic has left a lot of good lessons to all of us who work in the informal learning field. Here are my thoughts:

An Entrepreneurial Spirit. We faced the need to reinvent our business models, from independent museum professionals, through big institutions. We were either forced, pushed, or inspired to think differently in the way we will
make money, offer services, and cater need to our audiences. The biggest challenge has been to balance mission and revenue goals. Both doable, compatible, and complementing each other. What I have noticed is that those who survived used an entrepreneurial mindset: trying new products, repurposing others, adapting to the "new rules".

Empathy and Compassion. Worldwide we were in a similar situation. The pandemic was quite equitable in terms of hitting equally to all of us no matter which latitude we were located at. We were able to deeply understand other colleagues' challenges. The multiple channels of connection: webinars, coffee breaks, virtual calls, happy hours, and other methods to create space to talk, exchange, check-in, and share how everyone is doing, and how everyone is coping with the current pandemic. It was inspiring, and empowering. This allowed us to connect regardless of the frontiers, the time zones, the interests....I am still enjoying the virtual dance parties, what a treat!!

Inter-Independence. A lot of our colleagues lost their jobs, and some managed to hire themselves in new institutions, new fields, new arenas. Others were forced to leverage their proficiency and offer their expertise as independent museum professionals. The existent professional networks received a boost of members, and thought leaders to move forward initiatives, and spaces to connect. Being an
independent professional, can be at times a lonely journey. I am grateful for those who reached out to soundboard ideas and support them in the process to become an independent practitioner, and I would say, an inter-independent practitioner. The lesson is that the community makes us stronger, stronger together.

Beyond the Walls. Finally, institutions managed to break the walls, and become more porous, and elastic, reaching out the communities, digitally, in the neighborhoods, beyond their own campus. Finally, visitors could bring the museum home, interact with explainers, and educators in their living rooms, at the local park, on the streets. What it has been preached for so long: be in the community, create with the community, those who managed to survive, did it so well, and I am grateful for all the hearts and minds that were inspired.

Now our challenge is to take these lessons and keep them to future iterations, where we can be even more entrepreneurial, empathetic, fun, provoking connections among each other, inter-independent.

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## Predicting The Future is Difficult

By Per-Edvin Persson

In the ILR special issue last year, I predicted that museums and science centres will need at least three years to reach pre-Covid levels of visitation. Now, 18 months into the global pandemic, it seems I was too optimistic. I based my prediction on previous economic crises and did not take into account the quite different nature of the current one. This is political, generating economic distress, while the depressions I referred to were largely economic, related to market forces.

The Covid pandemic has struck out quite differently in different countries. In Finland, for instance, the total death toll due to Covid during the first 12 months of the pandemic was around 900 persons. The normal seasonal flu kills about three times that number every year in Finland. When the pandemic hit, the Finnish government naturally, like every other government on the planet, instigated similar restrictions as everywhere else.

Many of the measures taken make a lot of sense to an old microbiologist like me, while others seem to have been dictated more by fear and hysteria than scientific evidence. The perhaps best example of the latter is the closing down of museums around the world. No infection chains are known to have started from a museum, and museums are institutions that can limit the flow of visitors very effectively. That did not help. This element of unpredictability makes it very difficult to judge how the future will shape itself.

At the onset of the crisis, it was predicted that the travel sector will need five years to recover to pre-pandemic levels. When we take into account how the museum field and the cultural sector is linked to tourism, it is perhaps more realistic to assume that full recovery of the survivors within the museum sector will follow that timeline. Again, I think museums can partly influence the speed of recovery:
a blockbuster exhibition in the next few years would probably help, unless a local government shuts down the place in fear of an outbreak.

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## Engaging Schools with Hands on Science

By Neville Petrie

The Covid pandemic has changed the way we all operate. In New Zealand strict lockdowns are graduated in severity from level 4 where people are only able to leave their homes for exercise in the local community and for going to the supermarket or doctor through to level one which is basically back to normal. Levels 2 and 3 place restrictions on movement and attendance at community events.

Schools have been affected by the uncertainty of level movements so any trips to outside venues like museums and science centres have been cancelled or are not planned because of the daily uncertainty of level changes. House of Science has been able to fill a gap by providing hands on science kits to schools through contactless delivery. Demand for our service has increased over the last 24 months with over $25 \%$ of New Zealand primary and intermediate schools subscribing to House of Science.

The House of Science has 15 branches around the country. Their scientific resources come in the form of more than 40 kits, each of which has a theme and aligns with the school curriculum. These kits provide teachers with everything they need, so that it makes it a whole lot easier for them to provide hands-on experiences with their students. A kit contains planned activities for use with up to 30 students. It contain all the required materials including consumables, student instruction worksheets, a teacher's instruction manual with useful background information on the kits topic and additional resources for students who need to be extended. Each kit contains activities in both English and te reo Māori (one of NZ's official languages).

Kits are named according to the theme, for example:

- May the Force Be With You (force, friction, mass and weight)
- Up, Up and Away (exploring flight, featuring paper planes)
- Weather Ready (cloud and rain formation)
- 3,2,1 Lift Off! (forces involved in rocket flight)

Kits are booked online and delivered to schools on Mondays and collected on Fridays at the end of a booking. Before the kit goes out to again it is cleaned, restocked with consumables, breakages replaced and materials replenished.

House of Science relies on three lines of income. Firstly local companies can choose to sponsor kits. A kit costs $\$ 2500$ (+GST). In the first year that covers the cost of the kits, and $\$ 500$ is put into a top-up account. The $\$ 500$ helps with the restock, cleaning, breakages, etc. In the second year we ask for the same sponsorship, and this goes towards maintenance, replacing parts, top-ups, delivery, administration volunteers costs etc.

Second, schools pay an annual subscription of $\$ 800$ which entitles them to loan a kit per week over the year, a very low cost if the kit is used to its full potential with each kit having 5-8 activities for up to 30 students.
Finally, as House of Science is a charitable trust, we can apply for financial assistance via various trusts and foundations.

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## Creating a Better New Normal

By Shawn McCoy

The past 18 months have certainly provided challenges for cultural institutions, as they have struggled to survive, while remaining true to their missions, their staff and their communities. However, these struggles have encouraged, if not forced, museums to reevaluate every aspect of their audience, guest experience, workforce and overall culture in order to better position themselves for the future.

Specifically, museums have recognized the need to better connect to their local audiences, showcase their in-house assets and leverage their internal expertise in more meaningful and lasting ways.

For example, as limited funding has not allowed museums to book national blockbuster exhibits or bring in high-profile works of art, they have focused their efforts on presenting their own, often underutilized, collections through exhibitions curated by their in-house staff.

Given that a majority of museums around the world couldn't welcome guests inside their buildings, the pandemic also encouraged museums to create improved access to their digital collections, including new virtual tours and online exhibits.

Museums have also recognized that in order to remain relevant in the future, they need to grow and diversify their audiences, by focusing on historically underrepresented groups in their communities. This has been achieved through thoughtfully targeted community outreach campaigns, marketing initiatives, partnerships, exhibitions, programs and events that better attract, represent and engage more diverse audiences.

Cultural institutions have also recognized that they need to not only grow and diversify their audiences, but their workforce and leadership as well. To address this, more and more museums are addressing their inequitable work environments, recruiting and hiring practices, by hiring diversity and inclusion directors; requiring their staff to attend anti-racism training and workshops; and partnering with local universities to create more culturally diverse internships and educational programs.

As our societies continue to wrestle with social inequities and political divide, museums have also taken the last year or so to take a closer look at the stories they tell to ensure they are presenting content through a more honest, multi-perspective lens. This self-assessment can certainly prove difficult, if not uncomfortable, as museum leaderships challenge the status quo. But these efforts are necessary should institutions want to better position themselves as trusted stewards of non-perfect histories and diligent agents of a more perfect future.

While our lives and cultural institutions have been facing a combination of difficult challenges recently, we should all take this opportunity to evaluate what has been acceptable as normal for some and strive to make the changes necessary to create a new normal that is exceptional for all.

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## REFLECTIONS ON A TIME "LIKE NO Other"

## By Margie Marino

As I reflect on the many changes our museum has faced in the past 16+ months, I feel we may never get to what any of us would define as a "new normal." I don't see change deaccelerating, nor do I foresee a lot of time for reflection-even as I approach the waning years of my long
career in museums.

I've never been busier than I am today, nor have I had less time to catch up. The early months of COVID were a mad rush to bring virtual programs online; provide public access
to collections; train staff and volunteers in the use of new software and digital techniques. Only now, with staff beginning to work on site again, can I say we are doing any work approaching what we did before-front-line work (cashier, custodial, security); on site programming and events, collections maintenance, and the enhancements that make a so-so museum experience personal and special. Yet every one of these activities is now different than it was before.

What I deal with on a day-to-day basis is a contradiction of many time-honored best practices in museums. The nature of museum visitation, what it offers the public, the density and complexity of museum education and its relationship to formal education, the expectation of hands-on and participatory experiences-all different. Never did I imagine spending so much time figuring out how to keep visitors away from each other or safely distant from museum exhibits.

And us, we are forever changed. We made major personal changes during our sequestering. We analyzed what we do and how we want to live. We moved to different places and considered different lifestyles. We turned our home into a workspace while our workspaces languished.

Staff returning to work are anxious and risk-averse. They are questioning everything you can question about the
workplace-management, pay scale, promotional opportunities, benefits, schedules, and-of course-whether they prefer to work in the museum or at home. And they recognize that now is the time to speak up. In many cases, they are finding more receptive ears than museum leadership who are being dictated to by politics and the CDC while being pummeled with diverse and passionate public opinions. Meanwhile, staff seem to want black-and-white answers in a very mushy world.

Where is this leading us? If you are a pessimist, unless something dramatic happens, we will be on computer devices 24/7. Reasonable public discourse will be a thing of the past. A lot of people will either burn out or drop out. But I'm an optimist-I see a lot of introspection and embracing of new possibilities, a return to self-reliance, introspection, and a greater appreciation for the outdoors.

Let's hope that happens.

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# What might be a trend in the 'Post-Covid New Norm' 

By TM Lim

A new normal is understood as a state to which an economy, society, nation, or the globe settles following a crisis, with adjustments or changes that did not prevail prior to the start of the crisis. The term has been employed in relation to the World Wars, September 11 attacks, financial crisis of 2007-2008, the aftermath of the 2008-2012 global recession, and now the COVID-19 pandemic.

With the roll out of vaccination faster than we anticipated we are in a new normal as we learn to live with COVID-19 as an endemic. Since 2020 we have been trying to live inside some protective 'bubbles' to avoid the invasion of the virus into our population or selves. That lifestyle is against human nature as we are social beings. The virus has also since been mutating to more virulent strains prolonging our battle against the pandemic. With vaccination and
herd immunity nations have started to adjust to living with the virus as an endemic condition.

A recent study asked for predictions on what life will be like in 2025 in the wake of the outbreak of the global pandemic, a broad and nearly universal view is that people's relationship with technology will deepen and we will live in a "tele-everything" world. Indeed, over the past year or two we have witnessed rapid advancement in digital integration of multiple and social media giving us various transmedia tools to communicate and tell a single story or story experience across multiple platforms and formats. Imposed by the need for safe distancing in our operation has accelerated digital transformation and the use of 'tele-communication' to help us stay in touch without physically coming together. The deployment of digital tools
and the power plus convenience of transmedia will stay as mainstream practices in the new normal operation.

In Singapore, we are now treating the COVID-19 as an endemic because Singapore cannot afford to prolong living inside a 'protective bubble' and we need to open our borders to sustain our economy. Our science center has been aggressively using transmedia to enhance our operation and outreach, literally making our science center without walls (except the firewalls for cyber security). We have built up substantial in-house capability to curate, create and communicate transmedia contents providing blended experiences to our target audience. This is of great signifi-
cance especially when we are part of the Ministry of Education and our programs are very impactful in supporting home-based learning and in-class teaching.

The outbreak crisis has opened new opportunities for us to make the best of all digital media platforms to fulfil our mission in science communication and education! The new normal is already here!

TM Lim is the CEO of Science Centre Singapore. He may be reached at lim tit meng@science.edu.sq

# DEVELOP A NEW STRATEGIC PLAN, EXPAND OUTREACH AND MOVE TO DIGITAL, DURING A PANDEMIC....REALLY? 

By Guy Labine

563 days ago (but who's counting), the world of science centers and museums changed, probably forever. Science North was on the cusp of experiencing one of its most successful years ever. We would open one of our best travelling exhibits produced by our team - The Science of Guinness World Records, 4000 kids would participate in summer camps in 35 communities, more than 10,000 people would participate in science festivals in 4 communities, Jane Goodall's Reasons for Hope, our 6th Large Format Film produced by Science North would be more than $50 \%$ complete.... I could go on.

At 5:30 p.m on March 13th, we closed and suspended work on these and dozens of other amazing projects, programs and great visitor experiences, but only for a short time. We wondered when things would get back to "normal" - they never did. However, with a great team, the word "pivot" printed on T-shirts and a willingness to embrace ambiguity and uncertainty, we moved from closure to delivering great value propositions ( 0 to $100 \mathrm{~km} / \mathrm{hr}$. in 3.4 seconds) to funders, partners and audiences.

As the pandemic continued, it became clear many of the assumptions, the environmental conditions and planning decisions used to chart a 5 -year strategic plan, were getting blurred in the uncertainty. Science North has a strong connection with Strategic Plans and their role in focusing the organization's resources to achieve results. They guide key decisions of the business plan and provide an account-
ability framework for the Board, funders and other key stakeholder.

In December 2020, Senior Management discussed the need, opportunity and risk of renewing/updating the current strategic plan (2018-2023). The Board unanimously supported the recommendation to move ahead with this work. How could the amazing shifts of the past 9 months be continued (or better yet, be expanded). How could we re-energize a team that was weighted by the ongoing uncertainty? How could we quickly engage our partners in this process?

With a team from across the organization, representing different levels and roles, we set off to capture the best of the last 12 months, focus on the value proposition best aligned with our recent experience and understanding of audience needs (and tolerances) to assemble a plan to guide the organization for the next 3 years. The plan is shorter ( 3 vs . 5 years), will have a mid-point review to adjust directions, validate key actions and make changes. The plan will also have built-in capacity to accommodate for changes as they occur. On second thought, it was the best time to do a strategic plan!

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## 'RELEVANCE' OF MUSEUMS: FROM RHETORIC TO REALITY?

## By Emlyn Koster

Will history show that the Covid-19 pandemic stimulated the museum sector to take steps toward a resilient future? In 2009 Marjorie Schwarzer recalled in Museum News: "When the funds began to flow again, museums quickly forgot the shock of the Depression as well as their moments of innovation on behalf of the public... An opportunity to be societal role models for the wisest possible use of resources and talent was lost". In 2012 when interviewed for an AAM Annual Meeting keynote address, Neil deGrasse Tyson predicted: "If in 2050 we were delivering the same messages, either we've failed at affecting change in society and still needed to give those messages, or we just got left behind and we were no longer on the frontier of what mattered in society".

Making Museums Matter in 2002 by Stephen Weil, a scholar emeritus at the Smithsonian, arguably continues to be the sector's most thought-provoking book. Beyond Management, his last article in 2006 which was published by ICOM, emphasized the awkward fact that museums lack a standard for gauging their relative worthiness. They still do. At the core of the museum sector's value lies the often used, but seldom defined, concept of relevance. With synonyms and antonyms that include pertinent and unconnected, respectively, it means being consequential to one or more specific matters at hand.

In his 1992 book Visionary Leadership: Creating a Compelling Sense of Direction for Your Organization, Burt Nanus cited a 1980 book about the genius of the composer Bach, the artist Escher and the logician Gödel. One way to imagine a more successful future is to synthesize new concepts by taking old ones and assembling them in new ways. In a 2006 AAM Museum News article, I opined that relevance involves topical content such as the divergence of society into rich and poor, the rise and fall of superpowers, the winning and losing of wars, and humanity's disruption of the natural world. My recent article in AAM's Exhibition journal elaborated on the paradigm shift that is needed to illuminate the Earth System with a holistic past-present-future mindset.

Each crisis confronting the world is named to enable public communication as it unfolds and for historical reference. When news breaks about catastrophes such as Delta, Dixie and Ida, most people soon grasp their what, why and how details. Yet for too long, progress of the museum sec-tor-borne of a purpose to be reflective and inspirational resources-has been impeded by numerous perceptual
disconnects. Homo sapiens are but one species among the millions of others who share Planet Earth. Nature and culture are interconnected. Environmental health and human health are interdependent. Academia and curatorship suffer from hyper-specialization. The different types of museums ought to blur their boundaries. Diversifying staff is only an advantage if this measure is surrounded by collateral big-picture actions. Timidity is the enemy of what is needed. The nice versus necessary debate is passé.

With this chapter of history besieged by a mutating pandemic, systemic racism, authoritarian regimes, and climate change with extreme weather, a profound introspection across the museum sector should be underway. While COVID-19 instantly resulted in major operational adjustments, airing of the hefty implications for each institution's values, visions, missions, and strategies remains inadequate. What was already a busy agenda of apt topics for museums abruptly magnified into a vital focus if they are to be meaningful in today's troubled world. The profound challenge for the museum sector is to seize this jolting period of environmental and societal changes as a launchpad for directional improvements and not just for operational adjustments. History tells us, however, that inertia tends to be a more powerful influence than courage.

As a geologist, museologist and humanist focused on the Anthropocene, my view of what urgently faces the museum sector is a wake-up call to become an integral player in the ecosystem of what matters locally and globally. Well-marketed meaningful experiences require deep directional thought with new stakeholders, including those who are rising up to publicly object to the status quo. In particular, it is my hope that this surfaces as a commitment to integrate the philosophies and priorities of associations and institutions. Well-informed, visionary, and effective leadership has never been more critical.

> Emlyn Koster, PhD has been the CEO of the Royal Tyrrell Museum of Paleontology, Ontario Science Centre, Liberty Science Center, and NC Museum of Natural Sciences. He can be reached at koster.emlyn@gmail.com.

# The Physical/Digital Blur: Engaging Audiences ON-SITE AND ONLINE 

By Paul Kortenaar

On March 13, 2020, the Ontario Science Centre shut its doors along with almost every science center around the world. We quickly migrated our public and educational programming on line and remained a vital part of the educational ecosystem in our province. We were successful at generating revenue from these synchronous and asynchronous offerings, creating the conditions for future growth. We also began to experiment with exhibit based experiences in the virtual world creating AR and VR opportunities for audiences to explore. We are excited to build on these successes as we continue to imagine what an authentic science center experience looks like in the virtual world and pilot new offerings and experiences.

The changes that Covid made necessary will continue into the future. We are committed to a "digital transformation" of the Ontario Science Centre that will see us offering complementary experiences in our physical location and in the virtual world. The trick will be to ensure the relationship between these two is seamless, extending and deepening the engagement for both our onsite and virtual visitors, and blurring the distinctions between them.

As an agency of the Government of Ontario, we have a mandate to reach the entire province. Our move to virtual offerings has suddenly made us accessible to more families and classrooms across Ontario and beyond. We have heard from teachers in schools who could never have visited due to distance, about their excitement to be able to access and use our programming for the first time. Pre-Covid, we would see approximately 175,000 educational visitors onsite. During the 2020-2021 school year, we engaged with over 1.25 M students and teachers.

In August 2021, we successfully opened our doors with health and safety measures in place, and with a suite of exciting new offerings including two travelling exhibits, with a third opening in September and a fourth in October. We saw very little attrition among our members, and ran a successful membership drive in August timed with our reopening. Our youngest visitors, who had enjoyed exciting programming developed just for them, were thrilled to recognize our hosts from their virtual engagements, "I saw you on television!".

KidSpark, our interactive play area will open later in September. We have taken extra time to understand visitor behavior and determine the best approaches to opening this high-touch area to our youngest visitors who are not yet eligible for Covid vaccines. We are extraordinarily grateful to the science center and children's museum communities for advice and guidance. The experiences from institutions that were able to open earlier than we were have helped shape our protocols as we move forward.

We look forward to an incredibly exciting future: stronger, more accessible, and more engaged with a wider community than we were before the pandemic.

Paul Kortenaar is the CEO of the Ontario Science Centre, Toronto, Canada. He may be reached at Paul. Kortenaar@osc.on.ca.

## Decision Making Under Uncertainty

## By Michelle Kortenaar and Charlie Trautmann

As leaders and managers, we find ourselves making dozens of decisions every day, from simple "do I take this call?" decisions to more existential decisions, such as those discussed recently in this journal by Greer (2021) and West and Chesebrough (2021). When considering strategic issues spawned by the current COVID-19 pandemic, we believe that the most useful approach for both short-term and long-term decisions is to start with the organization's core values and a set of mutually agreed-upon decision making guidelines. To be effective, both of these lists need to be an integral part of the organizational culture and have broad, regular support from leadership.

We favor core values that are realistic (not aspirational). They should be the values that an organization actually uses when approaching difficult decisions. For example, if diversity, equity, and inclusion represent a core value, then they should be key considerations when making all HR, programming, and funding decisions.

Decision making guidelines identify and clearly articulate the most important considerations that all members of an organization (board, staff, members, volunteers, and others) are encouraged to use when discussing decisions at all levels. We developed the set of decision guidelines in the inset with our staff and have regularly updated them over the past decade.

In the case of decisions related to the current COVID-19 pandemic, a set of decision guidelines can help make sure that: 1) all the relevant information is on the table; 2) staff and board members have done their homework when recommending a decision; and 3) the most important factors are being considered.

While core values and decision guidelines don't make the decisions for us, we have found that they promote respectful, informed dialogue at all levels and ultimately lead to better, faster, and more strategic decisions.

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## Decision Making Guidelines: An ExAMPLE

Who should be involved in making the decions (and how)?

Whqt is the primary goal?
Will the decision be made by command, consult, consensus, or vote?

Does it advance our mission, vision, values, \& strategic plan?

Are we passionate about it?
Will it enchance the experience of our audience?
Will it enhance our finances through revenue or goodwill?

Will it enhance our reputation or community's quality of life?

Do the potential rewards outweigh the risks?
How does it fit in with other priorities \& is this the best time to do it?

Is it sustainable, or does it advance our sustainability goals?

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## PLANS ARE WORTHLESS

By Nik Honeysett

## "Plans Are Worthless, But Planning Is Everything"

- President Dwight D. Eisenhower

I've often heard the phrase "the new normal, whatever that will be". This just in, its already here and I think we all know what it is, we just don't want to say it. The new normal is complicated, hybrid, competitive, and disruptive. We are not done with the pandemic and it is not done with us. Climate change is increasingly affecting our operations, with nightmare stories from coastal museums of storm-forced closures and flooded storage areas. We need an increasingly hybrid approach to our staffing models and processes, with a workforce that is demanding more control of when and where work happens, and greater transparency and diversity in our hiring practices. We read headlines of museums facing questions of where their high-level donors' money has come from, and many museums are taking a hard look at themselves and rethinking how they talk about their collections and programming. Is this complicated, competitive and disruptive enough?

What are we expected to do? While I don't claim to have an answer, I have a suggestion. Einstein once observed, "We cannot solve our problems with same thinking we used when we created them". Never were truer words spoken for the times in which we live. We must do things differently and the one thing that must look different is our strategic plan.

We are living in chaotic and turbulent times, a strategy should not only plan for sustainability and growth, but protect us from disruption. To borrow from Donald Rumsfeld, our strategic plans should be less about known knowns and more about known unknowns and unknown unknowns. The known known of strategic planning would be strategies siloed by department or program activity such as attendance, school groups, or contributed revenue. We mark our known knowns with a time stamp, a "five-year" plan. However, our new normal must be to strategize for the unknowns through efficiency, productivity, capability and responsiveness to support our known known goals, and without a time limit since these are not projects with a beginning, middle or end.

We need to be more innovative, nimble, relevant, and entrepreneurial, making our strategies less of an art and more of a science, and the discipline and determination to do the work. Nimbleness and innovation require struc-
ture and process maturity to succeed, we must look at our internal systems, create common understanding of how we work, and clarify the roles and responsibilities of those tasked to do it. We struggle to recognize the value that appropriate investment in people, process, and systems can deliver. As I write this on a plane, the advice in case of emergency, is to secure your own oxygen mask first. Step one of our new normal strategy.

This is new so l'll offer some thoughts on innovation. There are three types: Efficiency, Sustaining and Growth and they provide a roadmap. The first involves eliminating inefficiencies and simplifying complexity across our workflows, platforms, processes and information, to make sustainable improvements and maximize capacity and capability. If we don't eliminate our inefficiencies, they will grow with us. The second involves using metrics and feedback to eliminate underperforming programs and activities so that we can focus our resources on honing those that will work best - yes, it's time to simplify and stop doing some things! The third involves pursuing scale by increasing productivity, diversity, and finding new audiences, channels, languages and platforms to engage audiences where they are.

This is the framework on which to hang our "new normal" strategy, so, let's worry less about writing a strategic plan that ends in 2025 and focus on embedding these philosophies and practices into our organizations. In a constantly changing world, embracing change as a constant, is our new normal.

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## Silver Linings and Stubborn Trends

By Carolynne Harris

The pandemic has brought on some silver linings in our field, and revealed some stubborn trends. Here are a few:

I facilitated my first virtual community engagement interviews and focus groups and they were not that scary - but were successful. Smaller groups were required, but since everyone is now video-conference savvy, those interviews and group discussions were not as stilting and cumbersome as I imagined. I have colleagues who have successfully performed visitor testing virtually. Conducting both of these very important tasks virtually makes them faster, garners many more responses, and is more economical. I believe this will make them much easier to incorporate and implement instead of being considered 'like to haves'.

And let's face it, as a road warrior, I don't have to travel as much and this costs my clients less and preserves my personal life more.

As folks yearned for IRL experiences, something other than a screen streaming content, became wary to touch public computer screens, and fatigue set in, l've heard some discussions of a possible pendulum swing back from "highly interactive" to more authentic object-viewing exhibition experiences. On the flip side, the exponential growth of content and personal interaction with screens has perhaps fed the increase in immersive (and instagrammable) experiences. Which will prevail? My hope is that both - with curators, designers and developers integrating them into a mix of opportunities for a larger variety of visitors.

The thrust of DEIA into the consciousness of many has also prompted overdue experimentation, discussion, and at least awareness of inclusion in our museums and programs writ large. The field has put our collective foot on the gas on these issues, and that is a silver lining for sure.

Studying other industries adaptations, and evaluating the operational and capital costs of large buildings that no one (or few people) was allowed or willing to go into has led me to be a bit of an evangelist for the idea that our culture's continuing edifice complex must be curtailed. Spending $75 \%$ or more on a building to house the exhibitions and programs that serve the visitors seems exorbitant, yet organizations continue to dedicate even more to the building rather than the community. We know we can reach more people where they are, yet the balance of investment (and operational support) between building and programs continues to defy reason.

One hopes that this stubborn trend, and others thrown into high relief by the pandemic is outweighed by the silver linings.

## Preparing and Priming OUr Audiences for Urgent Climate Change Action

By Patrick Hamilton

"I revere good writing and art and music, but it seems to me that only science, aided by human decency, common sense, farsightedness, and concern for the unfortunate and the poor, offers the world any hope in its present morass." Oliver Sacks, The New Yorker, February 11, 2019

Science has demonstrated a stunning alacrity in addressing Covid-19. Highly effective vaccines, for instance, have been developed at a stunning pace. I hope and anticipate that Covid will recede as an acute crisis in the coming months and become more of a protracted but manageable public health challenge. What has surprised me since the Covid
pandemic first erupted is how rapidly climate change has metastasized into an acute global threat.

I won't enumerate the recent series of climate disasters around the world other than to point out they are quite alarming to the climate science community. Climate predictions have long pointed to the increased likelihood of such events, but not so soon. The fact that they are happening now suggests a climate system more sensitive to carbon dioxide pollution than scientists previously thought and therefore that we as a society likely will have to implement carbon reduction strategies even more urgently than we presently realize.

The National Academies of Sciences, Engineering, and Medicine provided presidents, Congress, and the U.S. public with high-quality, objective advice on science, engineering, and health matters since its founding in 1863. Its overview on climate change (https://bit.ly/32IXXYU) states it is one of the defining issues of our time.

With more than 13,000 members, the American Meteorological Society disseminates atmospheric, hydrologic, and oceanic information that 330 million Americans depend on daily. Its climate change statement (http://bit.ly/2Mq9Uf9) states, "Projected warming over the next century will likely place global temperatures in a range not seen in millions of years of geologic history."

Science museums and centers in possession of this infor-
mation should prepare and prime their audiences for the task ahead by establishing themselves as climate leaders and modeling how our society can achieve the scale of renewable energy and energy efficiency implementation necessary to meet the challenge. The energy transformation already underway and the efforts by the Biden administration to accelerate it is a rare educational opportunity.

The pace of change necessary to mitigate the worst of climate change will dwarf the mobilization to fight World War II. This mobilization will not last a few years but will require decades of effort. And unlike the mobilization for World War II which largely kept in place existing class and race structures, a successful climate mobilization truly will require an all-of-society approach with everyone provided opportunities to contribute and to be rewarded for their efforts. Our community should want to lead on telling these stories.

Future generations will look back on 2021 as the pivotal year in combating climate change. Failure is not an option. How do we want our community to be remembered when future assessments of this moment in history are written?

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## Observations and Impacts on the Cultural COMMUNITY

## By Patrick Gallagher

As we now approach 18 months into the global battle against COVID-19, the Cultural Landscape has certainly seen a transformation. From my perspective today, I am pleased and relieved to see that now, with some restrictions being lifted museums are slowly coming back to themselves. I am also so reassured that the public is coming back to their beloved institutions. Even with masks, social distancing, and limited capacity, museums are welcoming their visitors back to reconnect to memories they enjoyed prior to the many lockdowns.

Of course, many museums have determined it is just not safe to reopen to the public. It is of course heartening to
know that the visitor of these cultural institutions valued them enough not just return as soon as doors were opened but in speaking to many institutions their visitors and longtime supporters were there for them with financial support as well.

In the first wave of shutdowns, there was a great deal of fear that many museums would not be able to weather the storm and would be forced to permanently close their doors. No doubt many museums did have dramatic staffing reductions which is one of the more tragic impacts of this pandemic. In contrast, others worked tirelessly to make as few reductions as possible.

Many museums were nimble and applied for government support while others dug into endowment funds and still others engaged donor support to bridge the financial shortfalls. It will be many years before we understand the long-term financial implications of this pandemic on cultural institutions, but there is no doubt that the public treasures their cultural institutions.

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## Aspirations

By Phelan Fretz

These are stressful times and to respond to today's chaos, it's time for museums to move from goals to aspirations, and here's why.

Today, change's accelerator pedal has been pressed to the floor. For the sake of comparison, let's visit another time of great change, the 1960s.

What is the goal of life? To accumulate the most money. That's what "The Game of Life" said when it was created in 1960. According to the game, you got there by going to college, getting a job, buying insurance, and saving for retirement. That's what was sold then. Over time, designers realized that the game didn't reflect consumers' changing views so they gave it a big update in 2007, allowing players to score points for virtuous deeds like saving an endangered species, opening a health-food chain, and recycling. And instead of starting the game at point A and finishing at point $Z$, there is no fixed path - you decide how you want to spend your time.

Roll forward to accelerant-fueled 2020 with the worst public health crisis in a century; the reality of climate change manifesting itself in record hurricanes, floods, wildfires, and heatwaves; and a racial reckoning with the murder of George Floyd that has spotlighted vast inequalities across society.

The extraordinary demands of responding to this triple threat of health, climate, and equity, screams "DO IT NOW OR SUFFER THE CONSEQUENCES!"

So what does this mean for museums?
In the same way that publicly traded companies have been able to hide behind "shareholder value", myopic museum management has become overly obsessed with the
clarion call to be financially sustainable. All too often, we overwhelm operational systems to meet the burdensome needs of key philanthropists and foundations in hot pursuit of diminishing grant dollars - justifying our reasons to overlook the basic human needs of our overworked staff and the critical role we should be playing in our communities.

Addressing multiple crises while attempting to meet the needs of those around us requires a radical shift. Insightful and challenging personal questions from the self-help genre may hold part of the answer. How Will You Measure Your Life? by Clayton Christensen, a well-deserved bestseller, draws lessons for individuals. Museum leaders should turn the same central framing question on their organizations - asking how they will measure their museum's lives?

To push the concept to everyday realities, how can we celebrate our high-impact preschool programs when the demands of our workplace make it nearly impossible for parents with young children to work for us? We talk of reimagining our daily experience so that it is compelling for all cultures - all people, but we can't seem to find space for cultural norms and practices outside our white, privileged, science-centric way of knowing and doing. We know we must radically shift our energy footprint and material sourcing to cement our leadership in climate response, but we hide behind our lumbering, big old buildings, lacking the resources to change the status quo.

Thought leaders increasingly argue that new models need to emerge. So how do we get there?

Transformation requires the simultaneous efforts of building and managing a bridge that repositions us from the museum of today to envisioning and creating the institution that supports our tomorrows. Inevitably, future
scenarios involve trade-offs. One idea might achieve our mission with a radical, new approach, but would require a wholesale service change, precipitating the need for new experiences and employees. Another might require a radical shift away from the current core business, resulting in layoffs that destroy staff morale. Decisions require an answer to the fundamental question of "Why are we here?"

Without a clear sense of our new purpose, it's hard to prioritize between scenarios. Your museum ends up wrestling with strategies that are at odds with financial sustainability, employee compensation, environmental impact, customer satisfaction, and access equity.

At my institution, these fundamental questions stymied us every time we needed a new strategic plan. The solution can be remarkably simple but challenging to the uninitiated. Rather than the SMART goals and logic models that show you the how and what - a predictably data-driven path - we discovered "Aspirations". Aspirational priority setting forces your team to find inspiration and articulate the "What is our purpose" and "Why are we here" questions while simultaneously giving you the flexibility to respond to rapidly changing conditions and do good work in your community.

Defining aspirations is hard. We all know of the great ones - Tesla's: "To accelerate the world's transition to sustainable energy", or TED's "Spread ideas". The bad ones are too numerous to share. Articulating aspirations forces you to envision a future where you are crystal clear, often
painfully so, about why your museum exists and what your impact will be.

I end with what might be a breakthrough, although time will tell. And a story about our struggles.

Pre-COVID, our Board and staff wrestled with a new vision. We arrived at "Inspiring a science-savvy community where nature and people thrive." It captures our dual focus on environmental stewardship and science, and challenges us and our community. It feels very aspirational to us. What do you think?

Like all museums, we struggle with defining an aspiration for our membership program. Go ahead, check out any ten fellow museum web pages. What you will see on their membership page is the list of benefits supporting a tired concept, defining the how and the what. Why our membership programs are vitally important or a necessity has not yet been tackled. After multiple dead ends and heated discussions, we came up with "Make an ECHO membership an essential chapter in every child's success story."

We may be getting there. Good luck with your journey.

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## Landing Nearer to Where We Stood

## By Seth Frankel

In thinking of the pandemic's greater meaning, I struggle to find universal truths broadly applying to our informal learning world. Eighteen months of a global pandemic continues to impact all facets of life. We have a bit of perspective, yet the tempest still spins overhead as we bob in and out of the water. Though, the waves seem more paced and similar in size. My current takeaways from where I sit:

Early optimism that spoke to this moment as a trigger for broad positive institutional transformation has largely faded.
Through both participating in and helping lead online discussions in the pandemic's early days, there was a frequent sentiment that a rethinking of our institutions was
perhaps a silver lining. That through the storm, a rebirth may give us a beautiful newness. This notion seems much quieter today. For better and worse, the traditions of our institutions and practices are engrained in who and what we are. Things are looking more like they were, or at least are more likely to drift back towards familiar rather than to arrive at radically reinvention, which may be no surprise.

Our institutions are more resilient than originally thought. Early pandemic days raised a cloud of fear that we may see massive, permanent closures of museums and other cultural institutions. A month into the pandemic, the American Alliance of Museums stated that perhaps 30\% of U.S. museums may forever shut if interventions were
not made. Indeed, some interventions were made, and coupled with our desire to survive we've so far not seen this level of impact. Factors are manyfold. Stock markets, painful layoffs of our most vulnerable museum workers, reduced operating costs, and many other ingredients point to survival skills we feared may not be within us.

We're planning our future physical assets for a future that looks more like those in our past.
When we all walked around grocery stores in the early days looking like we're geared up for a HAZMAT scene, we turned to conversations about technologies and reinvented spaces to have museums effectively become surgical suites and isolation chambers (we've learned that this particular virus isn't as easily transmissible through surfaces). Still, we've also learned that we desperately hate the idea of creating such experiences for our public. In my own firm's eighteen month of continued planning, we've not observed clients pushing to significantly shift away from their desires for future visitor engagement modalities.

Remote works [somewhat]. For ourselves. For [parts] of the public.
As an exhibit development/design firms director for twenty-something years, I honestly never believed that our creative services built around a studio atmosphere could thrive with a fully remote workforce. Indeed, there are clear moments that suffer. Sketching around the table is sorely lacking. Informal collective creativity is scant. Keeping everyone coordinated requires significant efforts of daily check-ins and intentional creative sessions. Leadership takes far more management. Yet, the work gets done, and done well. A huge added benefit has been the reduction of extraneous travel that taxes our personal lives, our planet, and our project budgets. Already, we see most
clients simplifying the in-person expectations. While it's fair to assume that this will slide back a bit over time, our new skills will prove useful well into the future.

On the public side, there's no doubt that our institutions have had less human contact - and that has a cost. Fewer humans see collections and the real thing, experience powerful and transformative moments of discovery, and embrace meaningful programs. Kids aren't stepping out of the classroom/Zoom-room on field trips. Yet, some audiences have become more diverse, though even that novelty is stressed by screen fatigue where everything is delivered through stifling sameness. Will resumption of "fully open" mean that our staff resources shift away from further developing the online? Probably. Even still, we can expect the idea of remote and in-person to linger in our planning and processes well into the future.

## It's magnified what we already are.

People, organizations, and institutions that had a culture of adaption, innovation, and nimbleness demonstrated it well. Others demonstrate quite the opposite and show some paralysis. Emergencies are the wrong time to build the skills needed to thrive in adversity, but rather are where such skills are activated.

## Let the mystery be.

What comes next remains unforeseeable, and that needs to be ok. Still, we plan, work, and carry on. Do we have another choice?

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## REVISITING "ScENES FROM AN EXTINCTION EVENT"

## By Kelly Fernandi

## The report of our extinction was an exaggeration.

I'm relieved to learn that the estimated museum failure rate of $33 \%$ has been revised down by half ${ }^{1}$. I hope no current or new variant causes a re-revision. For my part, the greatest concern last year was the world's overnight aversion to touch. If COVID-19 was, as first imagined, spread via surfaces, then high-touch hands-on exhibits like ours faced an existential crisis. Physical and tactile engagement became something to be avoided under threat
of death. While airborne transfer presented its own array of concerns, the finger of blame and transmission was no longer pointed squarely at shared surfaces. This didn't stop us from disinfecting everything in sight (a routine I expect to drop off considerably). But this culpability shift from surfaces to aerosols essentially saved both my company and what I consider to be an invaluable approach to engagement and learning.

## The more things are forbidden, the more popular they become.

What will be the new normal? Speaking both as a vendor and visitor to museums, I see the overall guest experience returning close to pre-pandemic normal. Most of our current mitigations will melt away. As much as I hope we adopt masking when sick as a common courtesy (like covering your cough), I expect masks to largely disappear, along with distancing. Hours and days that were shortened will return, as will in-person events, galas, and the high touch elements we've all dearly missed. Despite our recent infection rates rivaling the pandemic's heights, I've enjoyed museum visits in CA, UT and MT with my mask being the only noticeable clue to the current crisis. Like fans flooding stadiums, visitors when allowed will carry on much like before.

## All generalizations are false, including this one.

Are we there yet? No, not until new infections drop to flu-level incidence and stay there.

OK, so when? Not soon I fear. It will be another year or more before the rest of the world catches up to the US and

Europe's levels of vaccination or antibodies. Meanwhile the possibility of future troublesome variants persists. So even if we return to near normal operations for periods like this past summer, the threat of renewed restrictions and ongoing masking will remain. I'd like to be wrong, and to see us ride the tail of the Delta curve into a nearly-normalized spring as vax and mask resistance melt away under the heat of mandates and preponderance of evidence. But recent history and human nature seem bent on prolonging our pain. The opposing sides in this science-centered debate appear too dug in to dislodge. And unlike the headers in this piece, the twain seems destined never to meet.

## ENDNOTE

${ }^{1} h t t p s: / / w w w . t h e a r t n e w s p a p e r . c o m / 2021 / 06 / 01 /$ after-warnings-that-a-third-of-us-museums-could-close-a-sur-vey-indicates-that-just-15percent-are-at-significant-risk

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## Back to Basics

## By Sarah Erdman

The request for a follow-up to my ILR piece "Surviving and Thriving as a Museum Professional" showed up in my inbox...and sat there for a while. Not because I was thinking deeply about my response or even actively ignoring it, but because it came just jobs and school for everyone in the family kicked into high gear. It was overwhelming, this huge push to "get back to normal" when really we are still being dragged along trying to scramble for purchase.

I realized that what really marked the last year for me was folding in on myself. I stepped back from every volunteer organization I was part of, I was barely on Twitter (except to doomscroll...that's its own separate issue), I wasn't keeping up with museum professional organizations or staying on top of current ideas. It was like I had to make my world smaller to handle the enormity of what was going on.

What came out of that though is that my relationships with people in the museum world deepened. If I posted something that was less then upbeat, people checked on
me. The question "How are you" got a truthful response. I learned more about people's whole selves and not just their "museum side."

My original piece was about listening to people who have been thinking about the pitfalls and "what ifs" of museums for a long time. I stand by that advice. There are amazing people out there who have the blueprints to change how museums do things. We have to make sure it isn't just the voices who have been the loudest the longest that are being heard.

The only thing l'll add is that this last year underscored how much we need to reconnect with the human side of the museum field. The collections and buildings have their place, but it is the people that make the museum. We need to value the museum workers in the field, push back against the hierarchy that tries to say one department is more important than others, or claim some people are "real" museum workers and others not. We need to continue to see the whole person and how that shapes, and
is impacted by, their museum work. That is how we will thrive.

## QUESTACON 2021: A GOOD BAD YEAR CONTINUES

By Graham Durant

Questacon had a good bad year in 2020. By most measures it was pretty awful. Bushfire smoke wiped out our summer season and peak visitation. An intense hailstorm hammered Questacon in January and then on March 20 Questacon closed to the public as the country went into lockdown due to the arrival of the COVID 19 virus. The situation did ease and by July 2020 Questacon was able to welcome very small numbers of pre-booked groups for a hands-off theatrical tour through the galleries. As confidence grew Questacon was able to move through different stages of re-opening and relaxing travel restrictions allowed the return to delivering programs to regional locations. A national award for 'creativity in a crisis' in respect of the 'Mission to Mars' theatrical visits lifted the spirits of the whole organization at the end of the year. The rapid re-prioritisation of activities bonded team members as only a shared challenge can. The overall staff response and an associated creativity dividend led to the conclusion that 2020 had been in fact a good bad year.

The start to 2021 was promising with the return of school groups and the opening of more galleries. Questacon was on a slow but steady road to recovery having modified exhibits, cleaning regimes, booking requirements, visitor numbers and staff training all in line with the public health advice and city rules around COVID. Then the delta strain arrived in Australia and on August 2021 Questacon was once again closed and facing another disrupted and uncertain future.

The second closure was a much smoother process than the first. Questacon at Home digital resources were ready to go, casual staff redeployment to support surge demands in other government agencies were rapid and outreach programs switched back to the digital delivery mechanisms pioneered during the 2020 closure. Staff were set up to work from home and new ways of meeting virtually were well embedded.

Scenario planning undertaken at the start of the first

COVID outbreak was repeated, the same questions recurring. When will we open again? What will our world be like when we do? Will families visit a busy and often crowded hands-on science centre after several months of hands-off activities and social distancing? How do we re-build educational tourism in Canberra? Will regional schools return? Will we ever be free of COVID-19 or will we have to learn to live with it? How will Australia and other countries recover from the economic impact of the coronavirus outbreak? When will our borders re-open and when will international travel options return?

One main difference second time around is that there are now vaccines available but this throws up important questions around re-opening when a significant majority of people are fully vaccinated but not all. Young children are not being vaccinated so should all front of house staff be vaccinated for their protection? Can this be mandated? Is it possible to admit only those vaccinated? Is this legal and how would it be policed?

There is no doubt that Questacon is being changed by the pandemic. Business plans for a stable system do not work in an environment of uncertainty. Revenue projections have to be down-sized to reflect the reality of a year of closure and re-opening with reduced visitation. Too many factors are out of our control influence outcomes creating uncertainty. Digital outreach will clearly form a significant part of a new living with COVID normality and for a few years it is clear that there will be less hands-on activity in the centre. Visitors will return but the road to recovery will remain long and bumpy.

[^3]
## The New Normal and Us

By Mel Drumm

At the Ann Arbor Hands-On Museum, our new normal may have arrived. I believe it resembles our old normal more than anticipated with the exception of proportional reductions in staff, attendance, and earned revenue. I have never felt more optimistic about the future of our industry after operating through unexpected challenges, intensive reflection, and future planning.

Our team demonstrated resilience and unbridled determination as they reinvented, retired, envisioned, and strengthened the hallmarks of our organizations. Our staff, trustees, donors, and partners invested in infrastructure through new health and engineering exhibit galleries plus we created an outdoor playscape at our nature center. We have strengthened our Unity in Learning initiative (three museums in an operating partnership) by adding a Challenger Center. As we emerge from the pandemic, we will offer leaner, newer, and nimble experiences as interest returns. Our public, members, governmental agencies, donors, and schools have buoyed us to continue the informal learning experiences we have provided for decades.

Throughout the early days of the pandemic, we were hearing predictions that children's museums and science centers were perhaps becoming obsolete due to their handson nature. After experiencing year-over-year increases in interest in our programs for more than a decade, the very thought gave us pause. Even our name, "hands-on" felt toxic during a period of "hands-off" activities. We are convinced that those days are well behind us.

Coming into the summer of 2021, we were approaching pre-pandemic attendance until Delta. Historical operations were based on a $75 \%$ earned revenue model, one fully repeatable when reaching 400,000 people annually. Attendance now is about $50 \%$ of our historical attendance,
projected to reach 240,000 people on an annualized basis.
Our biggest challenge is adapting to a model with greatly diminished field trips. School field trips comprised about $30 \%$ of our attendance. School visitation evaporated with the pandemic. We have consolidated a robust suite of educational programs into outreach, distance learning, camp, and live animal activities. While we see interest in field trips, we do not expect previous on-site school attendance to occur soon, if ever return. In predicting school programming, we are anticipating demand for content-rich small group programming at our science center, nature center, aviation museum, and Challenger Center. Distance Learning has been active here since 2004 and continues to grow. Our programs have doubled in size in our upcoming budget. We are investing in Outreach across our organizations. We think Outreach will soon resemble a traditional visit as we bring more interactives to schools and libraries.

When the next disruption occurs, and we sincerely hope it does not arrive soon, the knowledge gained over the last eighteen months should carry us through nearly any crisis. Our organization today is a regional organization that imbeds us into local and regional communities in flexible forms while preserving and updating the experiences people have embraced over time. We do not plan to invest in monumental buildings going forward. We will invest in monumental experiencers comprised of pop-ups, collaborations, and delivering programs in shared spaces.

[^4]
# Future Too Early to Predict, But History Can INFORM Us 

By David E. Chesebrough

It is natural to wish and think that the pandemic will come to an end and life will resettle into its old norm. However, the future remains uncertain and it would be premature to believe we can describe the new norm. An historical look could help.

We might be surprised at how many current trends "revert" to pre-pandemic norms. In researching past periods of major disruption (1918 pandemic, the Great Depression, WW II) a number of very pronounced changes were not sustained - think women in the workforce/factories/military during WW II.

However, out of each significant disruption came a few substantial societal changes helping to shift society as a whole. (My LinkedIn post expands on this https://bit. ly/30h650M).

What many experts do predict is that the recent societal changes and turmoil, and the growing impact of Millennials and Gen Z, will continue to transform our society -- think how the 60's changed U.S. life, society and politics. Also, the daily news highlights the relentless, pervasive and accelerating impact of climate change.

Leading scientists project that the novel coronavirus will not go away. It will become endemic. The 1918 Spanish flu became the ancestor of flus since then. What may change, though, is the frequency of new, disruptive viruses evolving from the increasing clash of humans and animals being further thrust together.

Looking at this big picture, many don't see easy and predictable years ahead -- projections will need to be responsive and evolving.

However, there is a useful way to parse current analysis.

Going forward I believe museums and other institutions will have to separate How they operate (e.g. think mobile adaptations) from Why they operate and What they do to deliver on their mission (e.g. what priority community needs they address).

I believe the Why? and What? need the greater focus right now. Two quick suggestions:

- Tap Recent Innovation and Focus -- Many science centers, museums and other non-profits quickly pivoted - not only in how they operate but in the ways they serve critical needs of their communities. This provides a strong pool of examples to draw upon.
- Increased Community Engagement -- Going forward, impactful and sustainable museums will need to be "outside-in" organizations. They will need to stay externally focused and connected, while maintaining a culture of innovation and evolution to respond to the changing context within which it exists.

Some of the Hows? we will likely see persist are:

- Digital engagement
- Redefined outreach
- Technology enhancements in operations
- Smaller, more flexible staffing

I covered much more in the "New World" Informal Learning Review articles in issues 167 and 168, co-authored with Mac West. The research and resources are greatly expanded in those articles and worth the read.

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# What Have We Learned? Disability Inclusion and THE "NEW NORMAL" 

By Sarah Burroughs

Last year in the April 2020 Special Issue of ILR, I published a piece entitled, "Let's Make this Mean Something: accessibility and inclusion in the post-COVID-19 museum". It implored museums to use the COVID-19 pandemic as an opportunity for learning and growth, especially towards creating more inclusive spaces for those with disabilitiespatrons and professionals alike. It teased simple, basic ways to improve accessibility and equity, such as by cleaning touchable exhibits more often, continuing distance learning programs, and allowing remote or hybrid work. It pointed out how these offerings not only help the disability community (over $20 \%$ of the population), but single parents, those with limited transportation, and more.

Now, there is constant talk of the "new normal" or even "returning to normal". Disability advocates across the globe are watching in horror, though without surprise, at how quickly society at large has gone back to choosing convenience over the safety of those most vulnerable. Long before vaccinations were easily attainable to all residents, I watched numerous employers begin denying remote work for employees regardless of medical need, even outside of the fact that this is premature, especially given the new variants running rampant and areas with low vaccination rates and lower mask usage. Additionally, the increase in productivity and well-being and the decrease in pollution and expenses should have been enough to demonstrate the benefits of allowing remote or at least hybrid work for
those that choose it.

If you are one of these employers refusing to allow employees who request it to continue to work remotely, ask yourself: why not? Why not have established on-site days for those that benefit from face-to-face meetings? What does your workplace do to protect your sensitive data and can this not be replicated? Why not simply require an employee to live within a given location if you wish them to live within the community you serve? If you do not trust your employees, that is a conversation in itself.

Remember, "normal" before was not at all equitable for so many people that have been historically marginalized. No matter your museum's mission, you cannot serve it without first serving all of the people in your communities, including your staff and volunteers. This is the time to demonstrate what you've learned during the pandemic and to grow from it. This is the time to make the "new normal" one that better serves everyone.

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## JUMP, I'LL CATCH YOU

## By Simon Tipene Adlam

"One flies and one catches. Nobody gets in between." is the famous line between Burt Lancaster and Tony Curtis in the 1956 film 'Trapeze'. I couldn't work out why that scene from this old movie got stuck in my head during the global pandemic. Now I think I have the answer. I see the relationship between the jumper and catcher analogous to our future leaders (the jumpers) and the trusted museum professionals (the catchers). Throughout my career, I have jumped many times. To be specific, my last jump was in

May 2020 when I learned that my father was Māori. This information has added another dimension to my professional journey. Diversity, equity, and inclusion (D.E.I.) have always been at forefront of my leadership style but now I have a new and welcomed perspective to add through a Māori and European lens.

At the beginning of the pandemic, I thought my triple somersault was prophesying that a new digital day will
lead our museums through the global crisis. I was wrong but I learned to ask the right question. How can a museum authentically move forward on issues related to D.E.I.? Recently, there were two catchers waiting for me on my last jump. One, an acclaimed scholar who describes D.E.I. as necessary for social cohesion. The other was an elder from my iwi (tribe) who blames the lack of D.E.I. as the reason for huge of rates suicide deaths among young Māori men. Unfortunately, Māori have borne the human cost of the collision of indigenous and colonial cultures.

I don't have an absolute answer to the above question, but I am working towards it. As we emerge from this pandemic, it needs to be asked repeatedly by museum professionals of how we achieve authentic D.E.I change. Always the optimist, I am encouraged seeing many Māori change makers jumping and a plethora of catchers waiting with less antagonistic people getting in between.

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Elder and scholar looking at ancestorial mountain, Motatau, Aotearoa New Zealand, 2020. Image: Simon Tipene Adlam


Figure 1 (left): Artist's rendering of the catastrophic arrival of an asteroid that caused the massive extinction 66 million years ago

Figure 2 (below): The Art Museum of Chicago was appropriately closed and took full advantage of its exterior statuary.


## THE INFORMAL LEARNING REVIEW

1776 Krameria Street, Denver, Colorado 80220

## ON THE COVER:

The University of Michigan Museum of Art uses this web banner to artistically inform audiences that the museum is responding to the current circumstances.

Back image: During the pandemic closures places like the Louvre in Paris were astonishingly vacant. On a typical day there are thousands on this plaza.



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