The Immersive LearningScape

Knowledge Transposed: Learning Globally, Applying Locally

By Tomas Jimenez-Eliaeson

"It would be an unsound fancy and self-contradictory to expect that things which have never yet been done can be done except by means which have never yet been tried."

- Sir Francis Bacon

Aphorism 6. Translation of *Novum Organum*, LXXXI. In Francis Bacon, James Spedding, *The Works of Francis Bacon (1864)*, Vol. 8, 68.

n an increasingly global world, where events in one corner of the world simultaneously affect other remote areas of the planet, global competition is becoming a continuously evolving phenomenon. Competition is also increasingly becoming an individual endeavor. As Thomas Friedman explains, we are no longer dependent on state economies (Globalization 1.0 - 19th Century), or even large companies (Globalization 2.0 - 20th Century), thanks to the enormous advances in technology in the last twenty years, the power is shifting to the individual. He writes, "the dynamic force in Globalization 3.0 - the force that gives it its unique character - is the newfound powers for individuals," (Friedman, 10). In such global economy, who has leverage competing for business, for jobs, or for clients? Individual's own knowledge and skills will be the differentiators in a global economy. As the world flattens, education heightens. Education is the gateway to our own individual's success, but more importantly, it's the teaching of curiosity, the love of learning and a passion for scholarship that we need to convey to our youth. The differentiator in the 21st century will

depend on the skills that certain individuals will develop to work, collaborate, lead, create, design, communicate, and interact with others from around the world.

We must understand how learning spaces can better adapt to the multitude of pedagogies and learning methods being used today. From traditional methods and Montessori, to Systematic Thinking and Project Based learning, one thing is clear: we are teaching the majority of kids in the same spaces we taught kids 150 years ago. The ubiquitous 4-walled classroom has maintained its status as the overwhelming choice of space to teach. While other comparable typologies such as workplace, housing, retail, and civic have changed considerably over the last 150 years, the classroom has maintained its identical shape in the majority of schools in the United States and around the world. The design of the classroom has been focused on a teacher-centered space for passive learning. The evolution of technology and the shifting ways in which individuals learn are pushing us to rethink whether the antiquated classroom is the best way to adapt to ALL learning methods. While customization

of every single part of our lives develops, as with DVRs on TVs, smart-phone applications, consumer goods, or foods in restaurants, education is still done in mass production.

Why? The classroom is partially to blame for this. It cannot adequately accommodate multiple methods of learning. Specifically, it does not facilitate interaction between students or teacher-student interaction, nor does it allow for the flexibility and adaptability of the space for multiple teamwork-oriented and technology-facilitated collaborative and interdisciplinary learning. Most of all, the standard classroom does not support active learning, engaging or creative spaces.



Typical Classroom



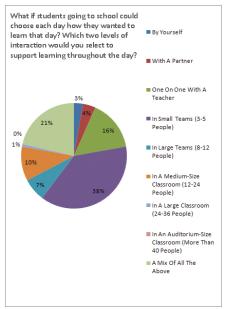
Teamwork specific environment (Steelcase's Media:scape)

If we are to compete in a global economy we will need to provide spaces that make us wonder, think, create, innovate, collaborate, speculate, question, interact and be active. Research shows that when students do these things instead of just listening, they retain 90% of the knowledge (Active Learning). We need to become a society of doers, not passive listeners. We also need to realize that learning nowadays happens anywhere, anytime, anyhow. All spaces, media and people can teach us; hence, we need to depart from the concept of the word: classroom. It is proven that we do not learn best in a class, that a room is no longer the only place we get information from, and that teachers are not the only persons we learn from. In one of the questions from our survey, we asked what the ideal group size for learning was, ranging from one person to an auditorium size room of 60+. An overwhelming majority of respondents selected small teams of 5-6 members as the ideal learning group. Small groups are where you



Source: University of Leeds Blogs

can test ideas, dialogue, interact and collaborate. For the most part, these are real world working-group sizes. Why are we not teaching in such sizes then?



Source: Survey by LITTLE

Our new millennium calls for a new way to think about education and the space where education takes place. The *Immersive Learningscape* provides our learners with the opportunities, experiences and interactive, interdisciplinary collaborative spaces they will need to be competitive at a global level.

The Immersive Learningscape speaks to two important aspects of education in the new millennium. First, is the idea that learning happens best when it is immersive. Whether with language, social sciences, history, geography, physics or math, learning truly happens when you are immersed in the subject at hand. Learning is best when you can interact with it in a multisensory method and manipulate, test, adjust and respond to the questions and challenges you encounter. In this form, learning is active, engaging, interesting and challenging-words that are definitely not descriptors used by current students in the K-12 schools in the United States.

The following student's comments were recorded by Marc Pensky in the article The 21st-Century Digital Learner: "I'm bored 99 percent of the time." (California); "School is really, really boring." (Virginia); "We are so bored." (Texas); "Engage us more." (Texas); "[My teachers] bore me so much I don't pay attention." (Detroit); "Pointless. I'm engaged in two out of my seven classes." (Florida) Additionally, in a 2009 survey of across-the-board American teachers, an overwhelming majority of teachers when asked "Which do you believe is the most likely reason that some of your students will not leave high school prepared to succeed in college?" responded with "Lack of student motivation," (Primary Sources: America's Teachers on America's Schools).

One additional quote truly summarizes the state of student frustration and disillusionment with the system. "It's easy to lament dropout statistics. It's easy to decry the crime and poverty all too often associated with diploma-less citizens. What's a little less easy is understanding why. Yet curiously enough the reason's relatively simple. While we've developed microprocessors and self-parallel-parking cars, classroom "innovation" has been limited to different-color worksheets. The modern world's taken off and left the schoolroom on the ground. In a world of vibrant video, instant communication and high-speed travel, how is a dusty overhead projector expected to engage the student? How are decades-old textbooks supposed to compete with Facebook for precious after-school hours? When the answer is "it can't," schoolwork becomes an irrelevant distraction from the real world, alienating and boring students rather than enlightening and informing. After all, when given the choice of spending time in an educational time warp or the exciting outside world, how



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many among us would choose the former? Jalen Ross, 17, Charlotte Latin School (Charlotte Observer)

The focus needs to be placed on active, engaging and unexpected learning, not teaching; something that Singapore, one of the world's leading education systems, shifted to with the Teach Less - Learn More method in 2007 (Singapore Ministry Education). The proposition here is not that teachers go away, they are imperative, especially in early grades, but that they become more guides or 'knowledge' counselors. They will help, direct and guide students to understand the challenges; to 'troubleshoot' as Apple calls it; and to facilitate where and how to continue learning. Teachers will create customized plans for each and every one of the students and will hold weekly meetings to see progress as they address goals and objectives determined from the offset.

Secondly, it's imperative that the classroom gives way to the LearningScape: a combination of spaces that together make a land-

scape for various ways of scholarship and multiple opportunities for size-specific learning. These spaces allow for technology-focused, project-based learning. They allow flexibility of activities and education, unexpectedness in thought provoking collaborative environments and brainstorming space for innovative and creative learning. This landscape of learning areas will better facilitate and encourage interdisciplinary innovative encounters between students and faculty, and will address the potential for every square foot of space to be maximized as learning spots, nooks, paths and spaces. The Immersive LearningScape shall be a place where there are five levels of learning spaces based on the size of teams of learners.

Think – based on the concept that learning also occurs at the individual level. Small intimate spaces allow for the time and environment to analyze and investigate, think and digest information.

Create – focuses on teamwork learning. These spaces can be arranged in multiple configurations allowing for flexibility of engagement and multiplicity of programming, as well as interactive learning in small to medium size groups.

Discover - this 'workshop' environment is set up for testing, hands-on and exploration, which allow for larger group meetings where equipment is necessary. These environments will encourage arts and sciences to co-create and invent via fabrication, testing, deconstruction, reconstruction, production and design.

Impart – rendered more as a typical classrooms. These spaces accommodate larger group gatherings, but feature break-out zones for smaller team areas and operable partitions to combine two classrooms for very large gatherings.

Exchange – inspired by the potential of social learning. Paralleling that of



Classroom of the Future

academic learning, this space becomes communal space, an environment shared between students, guests and citizens alike. Rendered as a vertical space, this dynamic space unites all learning academies.



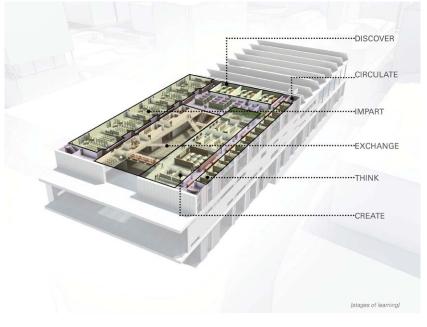
Source: www.videowap.tv

Technology has pushed the potential for our students to create not just absorb, for customized education not mass-teaching, and for interactive learning not passive. Haptic, multi-sensory technology can allow us to physically interact with a specific subject. i3D software is allowing us to peel the different layers of a brain, turn it and twist it, as if we were surgeons in an operating room. Enhanced, or augmented, reality software is allowing us to learn about the things we see in an interactive way, such as walking the streets of Paris and learning about

what we are witnessing at a deeper level of information. These are readily available technologies that need to be actively used and engaged by our students.

The *Immersive Learningscape* will also be critical in another specific way. It will enhance the importance of transposable learning. Acquiring knowledge *here*, and applying it *there*. As globalization equalizes, 'glocalization' will differentiate. Who prevails will be determined by who can make the connections with the 'other' end. It will no longer be enough to know; we will need to

excel at learning how to apply our knowledge at a local or regional level, anywhere in the world. Whether with language [Global language (English) - Glocal language (Vietnamese, South African, Chilean, Slovakian)], or culture [Glocal Culture (economics) - Glocal culture (social etiquette in Japan, food customs in Honduras, sports in Pakistan, music in Tunisia], business practices or technologies, the more we know and can relate, identify and interact with other individuals in other parts of the world, the more academic and professional leverage



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we will have. The *Immersive Learningscape* is poised to allow something that the classroom cannot achieve: enable students to interact with the world in a multi-sensory way, allow the flexibility to learn in a multitude of ways, engage students in collaboration with peers in appropriate environments, give students the time to think and digest what is being presented and provide the opportunity to network with other students and teachers on both academic and social levels, locally and globally. \blacksquare

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Tomas Jimenez-Eliaeson is the director of design for the Charlotte Community Practice Area at Little, an industry leading architecture and design firm with more than 185 professionals in five locations across the country. He leads a team of architects and designers dedicated to educational, cultural and civic projects including museums, libraries and academic institutions. Originally from Spain, Tomas understands both European and American cultures and injects both experiences into his designs. His emphasis is on urban design, structure, building technology and the design process from concept to construction administration. His style and expertise come together to provide clients with collaborative solutions that acknowledge social responsibility, build community connections and enhance business performance. Tomas can be reached at: teliaeson@littleonline.com

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