

THE LIMITLESS INSTITUTE: THE HUMAN ACCELERATOR

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ABSTRACT

Higher education and universities have not truly transformed in centuries but may now be going through dramatic change. This report will look at some of the conundrums and trends that provide a glimpse of the future of higher education. The landscape is encapsulated by introducing some of the academies leading the charge in developing new models and approaches to higher education. Finally, the ingredients of the potential solution address the gaps and needs of the target market. This solution due to its complexity and magnitude, needs to be a suite of versatile solutions rather than a single uniform one.

And **The Limitless Institute** does exactly that through its highly modular program built into the existing systems. Finally, the report explores new mediums through which higher education could be delivered; including a reality show. The report concludes by stitching the need and desired outcomes for higher education with the potential curriculum.

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INTRODUCTION

College is a kitchen with the ingredients needed to build great humans helping them clarify what they can offer the world, professionally, mentally and personally.

The youth represent 17% of the world's population but 40% of the world's unemployed and twice as likely as adults to be without a job¹. Only 23% of the youth around the world are employed in quality jobs resulting in negative social effects on the society along with billions in lost wages according to the World Bank². Finally, by 2020, 600 million jobs must be created in the emerging world specifically in Africa and Asia in order to accommodate young people entering the workforce².

All these in a world where old social and environmental challenges have taken on new forms and is seeking problem solvers, especially in the emerging world. And even if young people are interested in cracking them*, employers say that they can't find the right kind of talent. McKinsey for instance states that companies globally consistently cite **talent** as their top constraint to growth. According to a

¹ World Bank (2012); World Development Report 2013; ILO (2012); Global Employment Trends 2012. (ONLINE)

² Global Employment Trends for Youth 2012. (2012, May 30) (ONLINE). Retrieved November 4, 2014, from http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_180977.pdf
- Global Agenda Council

* Millennial Innovation Survey. (ONLINE) (2013, January 1). Retrieved January 9, 2015, from <http://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/dttl-crs-millennial-innovation-survey-2013.pdf>

report from the McKinsey Center for Global Governance³, 43 percent of employers say there simply aren't enough applicants with the knowledge and skills they need. *“Unemployment is persistently high, yet organizations worldwide report difficulty filling key positions”*, concurs another think-tank Manpower⁴. Finally, *the Economist’s Special Report “The Great Mismatch” explores the divide and confirms this on its findings.*⁵

Why the Paradox?

Many employers believe that recent graduates do not possess the necessary skills, competencies and the right mindset to drive the organizations into the desired future.⁶

What employers are really looking for are **surpluses of creativity, ingenuity and compassion**⁷, **a mindset towards lifelong learning and problem solving skills**⁸; not necessarily the quantitative and technical proficiencies associated with the

³ Mourshed, M., Farrell, D., & Barton, D. (n.d.). Education to Employment Report (ONLINE)| McKinsey on Society. Retrieved April 11, 2012, from <http://mckinseysociety.com/education-to-employment/report/>

⁴ Navigating the Changing World of Work. (ONLINE) (2010, January 1). Retrieved November 4, 2014, from [http://www.manpower-venezuela.com/upload/File/2010 ENG Navigating the Changing World of Work.pdf](http://www.manpower-venezuela.com/upload/File/2010%20ENG%20Navigating%20the%20Changing%20World%20of%20Work.pdf)

⁵ Got talent? (2011, September 8). (ONLINE) Retrieved November 4, 2014, from <http://www.economist.com/node/21528436>

⁶ Kavanagh, S. The student revolution has begun. (ONLINE) (2012)

⁷ Huffington, A. (ONLINE) (2012, July 9). What Is Working: A Bipartisan Search For Solutions To The Jobs Crisis. Retrieved November 21, 2014, from http://www.huffingtonpost.com/arianna-huffington/opportunity-what-is-working_b_1657998.html

⁸ Robert J. Sternberg . “Giving Employers What they Don’t Really Want”. (ONLINE) Chronicle of Higher Education, (2013, June) source: <http://chronicle.com/article/Giving-Employers-What-They/139877/>

job⁹ as they're no longer the most crucial skills for determining success. According to the Job Outlook 2014 Survey, employers believe that the candidates who demonstrate soft skills are best suited to succeed in the workplace. Those who demonstrate these skills are believed to have the capacity to work in a team structure, make decisions, solve problems, and plan and organize their work.¹⁰ They also emphasize that internships and other real-world experiences are essentials.¹¹

"One of the things we've seen from all our data crunching is that GPAs are worthless as a criteria for hiring, and test scores are worthless — no correlation at all except for brand-new college grads, where there's a slight correlation... What's interesting is the proportion of people without any college education at Google has increased over time as well. So we have teams where you have 14 percent of the team made up of people who've never gone to college."

- Google's Senior VP of "people operations," Laszlo Bock¹²

The education system of the industrial-era optimized itself to prepare students for jobs that are increasingly being handled by software and technology today.

Therefore, a shift towards teaching skills such as **emotional intelligence, self-discovery and self-awareness, problem solving, leadership, teamwork, and empathy** is more relevant now than ever before. Despite the urgency, these

⁹ Ashoka: Martha C. White. "The Real Reason New College Grads Can't Get Hired." Time, (2013)

¹⁰ TIME: Kevin Gray. "The Candidate Skills/Qualities Employers Want." (ONLINE) National Association of Colleges and Employers, 2013.

¹¹ Ashoka: Martha C. White. "The Real Reason New College Grads Can't Get Hired." Time, 2013

¹² Bryant, A. (2013, June 19). In Head-Hunting, Big Data May Not Be Such a Big Deal (ONLINE). Retrieved November 4, 2014, from <http://www.nytimes.com/2013/06/20/business/in-head-hunting-big-data-may-not-be-such-a-big-deal.html?pagewanted=1&r=2&smid=tw-nytimesbusiness&partner=socialflow&>

higher order skills needed to compete in the job market today¹³ are still not taught in universities; further widening the talent gap.¹⁴

Unemployment Crisis or Educational Crisis?

"Lowering unemployment will require changing education so people enter work equipped with skills firms are willing to fight over".

- **The Economist**¹⁵

"To succeed in the 21st-century economy, students must learn to analyze and solve problems, collaborate, persevere, take calculated risks and learn from failure. Studies have shown how innovation most often happens] despite their schooling— not because of it. With a market place that wants ingénues we need schools that offer an arena to develop innovative skills." argues educator Tony Wagner¹⁶. With all this, it doesn't seem very convincing to say that higher education is providing their graduates with the right skills to navigate the fast changing global economy.

¹³ What Matters Most: Teaching for America's Future. (1996, January 1) (ONLINE). Retrieved November 4, 2014, from <http://www.namodemello.com.br/pdf/tendencias/whatmattersmost.pdf>

¹⁴ Two Sides of the Same Coin: The Employment Crisis and the Education Crisis. (ONLINE) (2014, March 4). Retrieved November 4, 2014, from <http://www.forbes.com/sites/ashoka/2014/03/04/two-sides-of-the-same-coin-the-employment-crisis-and-the-education-crisis/>

¹⁵ Got talent? (2011, September 8) (ONLINE). Retrieved November 4, 2014, from <http://www.economist.com/node/21528436>

¹⁶ Tony Wagner. "Educating the Next Steve Jobs: How can schools teach students to be more innovative?" (ONLINE) The Wall Street Journal, April 2012 from <http://online.wsj.com/news/articles/SB10001424052702304444604577337790086673050?mg=reno64-wsj&url>

Maybe because the classic university system was designed to foster academic research and emphasize theoretical knowledge. But at the turn of the 20th century, it shifted to a blend of research, theoretical knowledge and practice but isn't really equipping people for the complex problems we are dealing with today. These intellectual frameworks and methodological foundations are dated and what is needed is to translate knowledge into action approaches to evaluate and reflect on those learnings. So, we might be at the precipice of a new evolutionary phase bringing with it a layer of transformation literacy that could usher personal and systemic transformation and collective action.

“The core curriculum--based on current mainstream economic and management thought--equips students with a mental framework that amplifies our global ecological and socio-economic crises instead of helping to solve them. What's at the core of this problem is not a failure of individuals, but the failure of an outdated intellectual framework that is profoundly out of touch with today's challenges.”

argue futurists in a recent report¹⁷. Simon Kavanagh from the Kaospilots, a hybrid business and design school in Denmark, believes that the divide between industry and academia is growing:

The divide is a fundamental outcome of the insular and egotistical focus of most universities and their subject matter's relevance to a changing world. And with this divide, large corporations are taking it upon themselves to

¹⁷ Future of Education. (2014) (ONLINE) Association of Professional Futurists.

design more people focused, leadership, innovative and entrepreneurial courses and programs. Experts believe that for the first time since the industrial revolution the mindset has overtaken the skillset in terms of employer focus. When asked in the UK whether they preferred predicting the mindset of the staff they would desire in 10 years from now, or the skillset; 97% said mindset¹⁸

This gap also extends to the social sector where employers are looking for traits like humility and leadership rather than the analytical skills taught at school. Amani Institute's survey¹⁹ highlighted that the traits employers value (**leadership, problem solving, communication and project management**) in incoming recruits are not provided adequately by universities. Conversely, what universities offer (*advanced academic grounding and hard skills*) is not valued highly by the employers and featured 8th and 9th on a list of 11 most relevant attributes they need. The report also emphasizes that future leaders of social change need to develop themselves through skill development workshops and field experiences where they gain empathy, perceptivity and humility to truly get out of their comfort zone; like the way a doctor, athlete or soldier would train. And this matters more than what type of degree was received and from where.

¹⁸ Kavanagh, S. The student revolution has begun. (ONLINE) (2012)

¹⁹ Paul, R., & Tesluic, I. (2013, January 1). (ONLINE) The State Of Talent Development in the Social Sector. Retrieved November 4, 2014

To decipher and interpret this mismatch, the **Education to Employment**²⁰ (McKinsey) report globally analysed three key areas: enrolling in postsecondary education, building skills, and finding a job. One key problem identified was lack of communication and clear expectations between employers, educators, and the youth. For instance, 72% of the education institutions believed that new graduates were ready for work, but only 45 percent of youth, and 42 percent of employers agreed. One in three employers said that they never communicate with education providers, and of those that do, less than half found it to be effective²¹. Finally, only half of new graduates agreed that their post-secondary education helped them get a better job and 25 percent end up taking some sort of interim employment that's not related to what they studied.

The underlying moral here is greater collaboration and better quality of communication between employers expressing what skills they need in candidates and education institutions ensuring that the students gain those skills. Undeniably, out of the successful education-to-employment programs McKinsey

²⁰ Mourshed, M., Farrell, D., & Barton, D. (n.d.). Education to Employment Report | (ONLINE) McKinsey on Society. Retrieved April 11, 2012, from <http://mckinseysociety.com/education-to-employment/report/>

- Social scientists at McKinsey analyzed over 100 innovative education-to-employment projects globally and surveyed a diverse group of employers, education institutions, and the youth in Brazil, Germany, India, Mexico, Morocco, Saudi Arabia, Turkey, the United Kingdom and the United States

²¹ Dwyer, L. (2012, December 11). (ONLINE) How Do We Design an Education to Employment System That Works? Retrieved November 4, 2014

- Abel, J., & Deitz, R. (2012, December 3). (ONLINE) Agglomeration and Job Matching among College Graduates. Retrieved November 10, 2014, from http://www.newyorkfed.org/research/staff_reports/sr587.pdf

reviewed, the key pattern was that education providers and employers actively stepped into each other's worlds. The grim realities prove that this crisis is indeed global, affecting the well-being of the society and robbing the enormous capacity of the youth to innovate, bring change and be an asset so as to contribute intellectually, financially and culturally to their respective economies. This will certainly happen through responsible co-creation between all the stakeholders involved (employers, educators, policy makers and the youth).

Coursolve seems to have cracked a piece of the puzzle. It empowers students to solve real-world problems by connecting courses and organizations. One hundred organizations of all types and sizes actively connected with learners and nearly 60% of the mature organizations indicated over surveys that they would collaborate with students to address future business problems. Most importantly, 72% of these organizations were seeking assistance on medium to very high priority challenges. The results were comparable across organizations of all ages, suggesting most would benefit from working with students.²²

But unquestionably, every revolution must be steered responsibly or it could have serious repercussions. One such is the evolution of the university into a sophisticated trade school producing a homogeneous workforce. This means, a dearth of poets, linguists and the fringe professions that have in many ways been

²² Nurmohamed, Z., Gillani, N., & Lenox, M. (2013, July 4) (ONLINE). A New Use for MOOCs: Real-World Problem Solving. Retrieved November 3, 2014.

Dwyer, L. (2012, December 11). (ONLINE) How Do We Design an Education to Employment System That Works? Retrieved November 4, 2014

the soul of the society and civilizations for centuries. The potential of these creative communities is realized in the spaces they inhabit and the death of these professions may certainly mean the death of our modern societies.

The Ingredients (Key Takeaways)

- Massive youth unemployment globally, particularly affecting economies in the emerging world. Still, employers cannot find the right talent or enough applicants with the skills, knowledge and the mindset they need.
- **What is needed is creativity, ingenuity, problem solving skills, a passion for learning and teamwork.**
- For the industry, the focus is on the mindset of the people rather than the skillset and soft-skills seem to be more desirable than GPAs. Yet, skills required are not taught at universities.
- The education system optimized itself for the industrial age but markets, priorities and approaches have changed. *So, the unemployment crisis is in fact an educational one!*
- The curriculum is out of touch with today's challenges, not helping solve our global scale problems but teaching the framework that rather amplifies it.

- The divide between industry and academia is growing, not shrinking; forcing industry to have tailor-made courses for their potential candidates.
- The mismatch extends to the social sector where what the industry needs is **leadership, problem-solving, communication, project management and field experience to gain empathy, perceptivity and humility.**
- One key problem for this mismatch is the lack of communication between students, institutions and employers on skills required and on job readiness.
- All this could be solved through responsible co-creation between all of them.

New Success Metrics. Prepare for the future. Shift Focus: Accelerate Skills.

DISRUPTORS

The human race is surrounded by massive amounts of data every day and possess more knowledge than ever before in history. A lot has changed information-wise, but the education system has remained static with many elements ripe for reinvention.

*A university doesn't mean campus, or class, or a particular body of knowledge; it means the guild, the group of people united in scholarship. The University we recognize originated in the 11th century and illuminated manuscripts from that period show a professor at a podium lecturing from a revered volume while rows of students sit with paper and quill -- the same basic format that most classes take 1,000 years later.*²³

Institutions will need to reimagine themselves and their value propositions and rising costs may be one of the reasons. As higher education is becoming more expensive without reciprocating the marginal value in quality, it is causing students to drop out or not progress enough in their careers to justify the amount.

²³ Kamenetz, A. (n.d.). How Web-Savvy Edupunks Are Transforming American Higher Education. (ONLINE) *Fast Company*. Retrieved October 6, 2014, from <http://www.fastcompany.com/1325728/how-web-savvy-edupunks-are-transforming-american-higher-education>

For some in the developed world, it is about \$240 for a 50 minute class, which begs the question, is it worth that much?

But the cost crisis contrasts the potential transformation offered by technology and online learning portals like MOOCs that are giving parallel learning opportunities for free. And it's about time that these fresh perspectives and mediums are manifested into new communities of scholars and models of education. All this will ensure that institutions would certainly encounter and undergo change, but would most of them ride the wave or crumble under it?

MOOCs: Revolution & Evolution

*“Five years from now on the web for free, you’ll be able to find the best lectures in the world... It will be better than any single university”.*²⁴

- Bill Gates

The college degree is certainly not about to disappear but will augment itself. Some may say that its future is online, but Massively Open Online Courses or MOOCs have not completely lived up to their expectations up to this point. This is due to the lack of a robust accreditation system, low completion rates, and the lack of support infrastructure in the emerging world. But investors and institutions are

²⁴ Humphries, M. (n.d.). Bill Gates: (ONLINE) Forget university, the web is the future for education (ONLINE) | News | Geek.com. Retrieved November 22, 2014, from <http://www.geek.com/news/bill-gates-forget-university-the-web-is-the-future-for-education-1275771/>

*More on this in the Unbundling section.

looking to bring in the next level of iteration and these problems could be a thing of the past. One such idea is forming a "community of practice" while teaching similar material to significantly improve student experience by using analytics.*

Reviewing the Revolution

With 9.2 million registered users, Coursera, recently captured \$4 million in revenues since it introduced an option to have their certificates verified by recording students' unique typing patterns. On the other hand, Udacity, partnered with AT&T and Georgia Tech to offer an online master's degree in computing, for \$7000 as opposed to \$25,000 while some colleges have already started to accept MOOC credits towards their degrees. Mona Mourshead from McKinsey's education division sees this as a turning point; *"If employers accept this on equal terms, the MOOC master's degree will have taken off. Others will surely follow."*²⁵

Like all revolutions, this too will have its fair share of victims. Mediocre universities may no longer justify themselves because of their low return on investment and their sensitivity to rising costs, therefore must lead the charge towards reinventing themselves to survive. This is particularly vital for many university towns that rely on universities for their economy. Clayton Christensen considers MOOCs a potent *"disruptive technology"* that will kill off many inefficient universities.²⁵ Moody's²⁵ for instance predicts mass bankruptcies within two decades, causing universities' revenues to fall by more than half, employment in

²⁵ The digital degree. (2014, June 28). (ONLINE) *The Economist*. Retrieved October 6, 2014, from <http://www.economist.com/news/briefing/21605899-staid-higher-education-business-about-experience-welcome-earthquake-digital>

the industry dropping by nearly 30% and more than 700 institutions shutting their doors²⁶. The least likely to be affected are elite institutions where the network, facilities and the resources are as valuable as the degree itself.

But the MOOC revolution will certainly do more good than harm; primarily, democratizing the degree and world-class content globally. EdX claims that almost one in two students come from the developing world; Coursera has registered users from 190 countries and are planning a massive expansion focusing on Asia⁴⁴. **edX**'s first course was an MIT hard circuits and electronics course where 155,000 students enrolled from 162 countries without any marketing budget. *"155,000 is a big number! That number was bigger than the total number of alumni of MIT in its 150-year history. 7,200 students passed the difficult course. 7,200 is also a big number. If I were to teach at MIT two semesters every year, I would have to teach for 40 years before I could teach this many students"*, affirms Founder Mr. Agarwal²⁷.

Another great example is **The University of the People**, in partnership with the United Nations which offers online bachelor's degrees in business and computer science using open courseware and volunteer faculty; even though the course is free, exam fees would add up to about \$4,000 for a full four-year degree. The **New**

²⁶ Creative destruction. (2014, June 28). (ONLINE) The Economist. Retrieved October 6, 2014, from <http://www.economist.com/news/leaders/21605906-cost-crisis-changing-labour-markets-and-new-technology-will-turn-old-institution-its>

²⁷ Agarwal, A. (2014, January 1). (ONLINE) Transcript of "Why massive open online courses (still) matter" Retrieved November 10, 2014, from http://www.ted.com/talks/anant_agarwal_why_massively_open_online_courses_still_matter/transcript#t-143654

Charter University on the other hand has a unique business model where students can take unlimited classes for \$199 a month. These models are also opening doors for life-long learning as the median age for MOOC students in the United States is 31 with over 70% having a degree²⁸

However MOOCs have their fair share of critics including institutions like Oxford and Cambridge; their central arguments being the high dropout rate (*90% for first-time subscribers*²⁹). This could be attributed to the negligible cost of enrollment, therefore the lack of ‘*pinch*’ or personal accountability to finish the course. EdX discovered that most dropouts happen quite quickly, and to counter this, producers are refining their courses to make the early stages easier to follow or to show that progression has already been made with little effort. This techniques involve game mechanics where users are reminded of what is already conquered, and therefore the task starts to shrink. This is an effective way to tackle the problem as Behavioral Economists like Dan Ariely believe that the key to motivating action is to make people feel as though they’re already closer to the finish line than they would’ve thought. And even though academicians have provoked opposition arguing that MOOCs will accelerate cuts to university staffing, the model does make sense financially. First, MOOCs could be set up quite frugally and provides unmatched economies of scale, potentially giving access to

²⁸ The digital degree. (2014, June 28). (ONLINE) *The Economist*. Retrieved October 6, 2014, from <http://www.economist.com/news/briefing/21605899-staid-higher-education-business-about-experience-welcome-earthquake-digital>

²⁹ Rivard, R. (2013). (ONLINE) Measuring the MOOC dropout rate. *Inside Higher Ed*, 8.

billions of people with just those initial costs, so it could be delivered cheaply or for free.

The Next Curve

It is premature to compare MOOCs with traditional higher education yet, but they certainly represent learning in different forms and settings. Apart from being highly convenient and breaking away from being time-bound or location bound, MOOCs have even shown to supplement higher education through special courses such as the ones launched by edX to earn extra credit or to catch up on missed topics. Finally, diversity builds innovation, and with its discussion forums and international perspectives from a vast number of students, MOOCs could be an invaluable source of knowledge in a globalized world; an environment that no single school could provide. So, it is not only that higher education is changing but also what constitutes a student itself. So, maybe MOOCs would augment the education system rather than replace it altogether; because of their inability to compete with the interactions, the experience and the human touch that universities can provide. But just as libraries evolved into the university, content is just the first step for online courses. Meanwhile, some have already taken strides to blur the lines:

NovoEd brings in a much needed feature of team projects where small teams meet virtually or face to face, complete challenges and get feedback from peers and mentors. Over 8,000 ideas have been generated so far and the top 20 teams

have pitched their ideas to investors and received funding. *"We're based on the belief that in this transition from bricks and mortar to online learning, you shouldn't strip away the social, experiential, and collaborative aspects of education,"* says founder Amin Saberi.³⁰ *"Instead, we use the power of the social web to amplify this."* Additionally **TechChange** fuses media, technology and social change through in-person studio sessions and online based group projects using simulations and Gamification. Courses include '3D Printing for Good' and 'Mobile Phones for Public Health' while making custom course for the UN, The World Bank, UNICEF, Red Cross, International aid workers among others.

Kroton & Brazil

Only 57% of children in Brazil finish secondary school and only 14% enroll in higher education³¹ but Brazil is making great advances by offering higher education economically and rapidly increasing quality; essential in a country where a degree boosts wages by a bigger multiple than in any other country tracked by the OECD. Kroton, its largest for-profit higher education firm is leading the charge through Unopar - the biggest provider of distance higher education with 150,000 students over 500 nationwide centers including ones from most remote parts of Brazil. Through a combination of online classes and weekly seminars at local centres, its *handcrafted* approach boasts star teachers, franchise

³⁰ Najarro, I. (2013, February 20). (ONLINE) Stanford Venture Lab's MOOCs reach global audience. Retrieved November 22, 2014, from <http://www.stanforddaily.com/2013/02/20/stanford-venture-labs-moocs-reach-global-audience/>

³¹ A winning recipe. (2014, June 28). Retrieved November 16, 2014, from <http://www.economist.com/news/business/21605925-two-big-brazilian-education-firms-now-process-merging-show-how-universities-can-do>

agreements with hundreds of local teaching centres and *adaptive* learning materials—that react to users’ progress by offering further explanation and examples where answers suggest they are struggling, and moving on swiftly where they are not. This is giving producers instant feedback and helping improve courses in real-time. And to deal with the drop-out rates, students could watch classes broadcasted from the headquarters and a moderated discussion to keep them engaged.³²

Blending It In

As seen from the examples, some of the successful models are replicating the interactions of universities. The answer that lies in finding the right balance and approach is called **Blended-Learning** -- where content knowledge could be delivered online so that classes could be conducted in a more collaborative and intimate setting to apply concepts, get critiqued and master core-competencies. Studies show that it is a highly effective way to learn when executed well³³; while the book *Blended*³⁴ provides a practical design guide to create blended-learning

³² Wealth by degrees. (2014, June 28). (ONLINE) *The Economist*. Retrieved October 5, 2014, from <http://www.economist.com/news/finance-and-economics/21605909-returns-investing-university-education-vary-enormously-wealth>

³³ Freeland, J. (2013, August 21). (ONLINE) Carnegie’s randomized controlled study: Take a victory lap, then continue the research. Retrieved November 13, 2014, from <http://www.christenseninstitute.org/carnegies-randomized-controlled-study-take-a-victory-lap-then-continue-the-research-cycle/>

- Also: (Chingos, M., & Schwerdt, G. 2014)

³⁴ Horn, M., & Staker, H. (2014). *Blended Using Disruptive Innovation to Improve Schools*. Hoboken: Wiley.

environments. Academicians approve³⁵ with many saying that online-learning is not being represented as much as it should be. Additionally, Mr. Agarwal from edX proposed a blended approach to a four-year degree course which begins with a year of MOOC learning, two years of on-campus learning and the final year working part-time while concluding their degree online. This approach could even pool popular and unique courses from several universities while reducing costs and keeping the value and the sanctity of the degree active.

The Ingredients (Key Takeaways)

- MOOCS have democratized the higher education degree and content globally, replicated and in some cases transcended its counterpart.
- It also boasts unmatched economies of scale as it is easy to set up and the **cost per user is negligible**.
- However, it has faced criticism due to low completion rates, absence of a robust accreditation system and **lack of support infrastructure** in the emerging world.
- But new wave of iterations like successful university collaborations, all-you-can-learn models, Gamification and simulation, highly economical degree models, **customized programs** for the UN, World Bank and other organizations are being tested.

³⁵ Bichsel, J. (n.d.). The State of E-Learning in Higher Education: An Eye towards Growth and Increased Access. (ONLINE) Retrieved November 22, 2014, from <http://eu.montana.edu/online/faculty/teach/pdf/ECAR-State-of-E-learning-June-2013.pdf>

- NovoEd, for instance brings team projects with an added incentive of starting companies and getting funded. **Using social web to amplify** and bring the much needed collaboration in the format.
- Brazil is making great strides by combining distance education with **local meet-ups and discussions**, instant feedback mechanisms and adaptive learning materials.
- It could even supplement higher education and can bring in highly diverse global perspectives through forums that no single school can. Even with all this, it still cannot substitute the human touch.
- Therefore, the future, many experts believe, lies in a **blended approach of both live and online learning** -- Exploring the limits while keeping the sanctity of the degree active.

Design for fringe communities.

Use online and offline mediums to amplify impact.

Low costs and integrating with society and systems.

Customizable to each environment and versatile:

KEY TRENDS

A ‘Major’ Problem (Purpose Learning)

As the world is getting more globalized and is shifting so rapidly and so is the idea of the college major. Four in Five students in the United States change their major at least once and some do it multiple times.³⁶ And even after that, 73 percent of college students end up working in fields completely unrelated to their majors.³⁷ It is worse when there is no flexibility to change majors other than starting from scratch like it is in most of the emerging world. This leads to a skewed and an unbalanced workforce hindering the innovation in the country apart from the loss of morale and productivity in the workplace.

The diagnosis seems straightforward. Students are not as clear about their future plans, their talents and their passions, as are many adults. But, many may have a problem or a life question that is calling for their attention that they would want to resolve. It may be building seamless prosthetic limbs through 3D printing and or making government departments more transparent through data science. This

³⁶ National Center for Education Statistics. (n.d.). (ONLINE) Retrieved November 21, 2014, from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012026>.

³⁷ Abel, J., & Deitz, R. (2012, December 3). (ONLINE) Agglomeration and Job Matching among College Graduates. Retrieved November 10, 2014, from http://www.newyorkfed.org/research/staff_reports/sr587.pdf

will help them understand the complexities the world throws at them that no single major could help them decipher. Maybe that should be the defining question for new students to ignite a spark in them and clarify the scope of learning and its potential applications in the real world. This spark will raise their tenacity and raise the level of autonomy and accountability; the key ingredients in any great learner. In fact, that is ideally the key objective of education itself -- to address the desire to impact the area of study and their changing behavior patterns to help them get there. The Strategic Foresight and Innovation team at Stanford expands on this idea in a futures scenario called *Purpose Learning*:

Purpose Learning³⁸

*Universities require students to declare their majors around set requirements before they have any real world experience, contexts or reference points for their studies. But what if they could declare **missions** and couple their disciplinary pursuit with the purpose that fueled it?*

“I’m a biology major” was replaced by **“I’m learning human biology to build more sustainable food sources.”** Or **“I’m learning Computer Science and Political Science to rebuild how citizens engage with their governments.”** It wasn’t about the career trajectory, but the reasons behind it.

³⁸ Purpose Learning. (n.d.). (ONLINE) Retrieved November 3, 2014, from <http://www.stanford2025.com/purpose-learning/>

This resulted in the changing vernacular on campus as well. “**What’s Your Verb?**” was the new idiom used as students were inspired by the work they were doing to investigate the kind of impact they were most interested in working toward. They started wearing t-shirts that just said, “**To Ignite.**” “**To Build.**” “**To Challenge.**” “**To Persuade.**” Soon, this unofficial tagline became the organizing principle for the new portfolios students had to create to graduate. Demonstrating evidence of clarity of purpose and experience creating impact, along with mastery of subject matter was key. The curriculum combined *Impact Requirements* with *Academic Requirements* and to facilitate this, Stanford would launch Impact Labs – Global research centers where students and faculty could collaborate with local leaders in authentic, real world challenges.

Unbundling and the Open-Loop

*“It’s time we built a better credential - the only legitimate signal to measure the competency of students; and the key to this is **Jailbreaking the Degree,**”* argues David Blake. His portal **Degreed** scores and validates lifelong education from both formal (University) and informal (MOOCs, Certificates, Conferences, Media, etc.). Users can build on their degree to display better patterns and details around their college experience for employers that is organized, searchable and verified. They would then decipher their own hidden passions and guide future projections of their careers through life-long learning and have it all validated. *“The diploma and*

the supporting mechanics (majors/minors, GPA, honors) provide limited information but are steeped societally in an enormous amount of context. We intend to use that context to help the world understand our measurements of the world of informal education”, adds Blake³⁹.

And it is factual. We’re increasingly learning from a diversity of sources, mostly informal/unofficial, which we continue to do for the entirety of our lives.

Unfortunately, everything reverts to the context of formal education. For instance, when people are asked about their education, they talk about where they graduated from. It seems to be the only way we speak about our education, by putting a finite end to it after university but we don't really stop learning.

Veritably, deliberate lifelong learning is more critical now due to mal-employment (*being employed without any use of the degree*). For instance, 40% - 60% of recent graduates in the United States are mal-employed.⁴⁰

Due to academic inflation (*diminishing value of the degree, requiring higher qualification and credentials to compete over time*) and the information age, the

³⁹ Blake, D. (n.d.). Interview with David Blake: The Future of the Degree. (ONLINE) *Harvard College Tech Review*. Retrieved March 26, 2013, from <http://harvardcollegetechreview.com/2013/future-of-the-degree/>

⁴⁰Fogg, N., & Harrington, P. (n.d.). (ONLINE) Mal-Employment Problems among College-Educated Immigrants in the United States. *Center for Labor Markets and Policy Drexel University* . Retrieved October 11, 2012, from <http://www.drexel.edu/provost/clmp/docs/clmpmal-employment-paper.pdf>

- Abel, J., & Deitz, R. (2012, December 3). (ONLINE) Agglomeration and Job Matching among College Graduates. Retrieved November 10, 2014, from http://www.newyorkfed.org/research/staff_reports/sr587.pdf
- Accenture 2013 College Graduate Employment Survey. (ONLINE) (2013, January 1). Retrieved November 10, 2014, from <http://www.accenture.com/SiteCollectionDocuments/PDF/Accenture-2013-College-Graduate-Employment-Survey.pdf>

skills and the knowledge acquired through a university degree no longer last throughout an entire career. In fact, they have an expected shelf life of only five years according to Deloitte's Shift Index⁴¹; Sometimes becoming outdated even before the student loans are paid off. Furthermore, automation and technology is beginning to impact white-collar jobs just as it did to blue-collar ones a few decades ago. According to a study from Oxford University, 47% of occupations are at risk of being automated in the next few decades⁴². The fragility and the sluggish nature of the college majors to predict future work patterns and the cycle of obsolescence continuing to disrupt work patterns are factors; together with the tendency of the *millenials* to switch careers frequently in an ever-changing world requires advanced learning and topping up on their skills and competencies at several periods throughout people's lives to remain relevant and competitive. Hence, the **Open Loop University**⁴³ by the Strategic Foresight and Innovation team at Stanford. Here, students receive six years of access to residential learning opportunities to distribute across their lives as they deemed fit rather than a 4 year one during ages 18 – 22. This way, students could gain knowledge, skills and network while in college, get real-world exposure and come back to accelerate, pivot and redefine their career path while equipped with the experience and perspective they need to focus on studies. Older students could also share their

⁴¹ The Shift Index. (n.d.). *The Shift Index*. (ONLINE) Retrieved October 6, 2014, from <http://www.deloitte.com/us/shiftindex>

⁴² Frey, C., & Osborne, M. (n.d.). *Oxford Martin*. (ONLINE) The future of employment: how susceptible are jobs to computerisation?. Retrieved September 7, 2013, from http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf

⁴³ Open Loop University. (2014). (ONLINE) Retrieved November 13, 2014, from <http://www.stanford2025.com/open-loop-university/>

wisdom and inspire younger students and reconnect with the community every time, making the campus more dynamic, balanced with youthful energy and wisdom. This approach breaks down the batches system, makes education more age-blind while de-stigmatizing a range of legitimate patterns of learning such as gap-years. Thus helping students make wise choices and better impact with their university investment.

All this leads us to a potential solution which is a spillover from a popular trend which software companies and the media are embracing; it is called ***Unbundling***.

To Bundle or Not To Bundle

Before the iTunes era, one had to purchase the entire album, even if the user liked only one song. iTunes forced a revolution in the business model causing the sales of recorded music to go down 50%⁴⁴ over the last decade thanks to \$0.99 songs replacing \$20 albums and most recently music streaming portals. This has been replicated across other forms of media like print and television with the rise of RSS feeds and news aggregators like Flipboard and Pulse and on-demand television like Netflix. So why not mix and match learning modules over semester-long university courses?

Bundling enabled universities to reach economies of scale and avoid the cost/benefit scrutiny that usually accompanies purchasing decisions. And just like

⁴⁴ UV Letters. (n.d.). *University Ventures Letters*. Retrieved August 15, 2012, from <http://universityventuresfund.com/publications.php?title=the-great-unbundling>

with music, unbundling could shrink per-student income considerably but universities would merit from additional customers gained from the producer surplus.

Experts seem to agree that it's a good idea. Clayton Christensen argues,⁴⁵ *"I bet what happens as [higher education] becomes more modular is that a credential occurs at the level of the course, not the university; so they can then offer degrees as collection of the best courses taught in the world. A barrier that historically kept people out of university [is] blown away by the modularization and the change in [course-by-course] accreditation."*

In fact, MIT studied Unbundling or modularization of education in a major report⁴⁶ where they explored⁴⁷ how they should innovate to these trends. *"The very notion of a 'class' may be outdated,"* the report claims while imagining a world where students can assemble courses themselves from different parts such as taking robotics at MIT, computer science from Stanford and innovation from Harvard. The reports also asserts that⁴⁸ professors could collaborate better by teaching sections rather than the whole course. Moreover, updating modules

⁴⁵ Blake, D. (n.d.). Interview with David Blake: The Future of the Degree. (ONLINE) *Harvard College Tech Review*. Retrieved March 26, 2013, from <http://harvardcollegetechreview.com/2013/future-of-the-degree/>

⁴⁶ Institute-wide Task Force on the Future of MIT Education. (n.d.).(ONLINE) *MIT Task Force*. Retrieved July 28, 2014, from http://web.mit.edu/future-report/TaskForceFinal_July28.pdf

⁴⁷ Thomason, A. (n.d.). The Ticker. *MIT Releases Wide Ranging Report on Its Future Comments*. (ONLINE) Retrieved August 4, 2014, from <http://chronicle.com/blogs/ticker/mit-releases-wide-ranging-report-on-its-future/83245>

⁴⁸ Young, J. (n.d.). Chronicle. *Wired Campus Are Courses Outdated MIT Considers Offering Modules Instead Comments*. Retrieved August 10, 2014, from <http://chronicle.com/blogs/wiredcampus/are-courses-outdated-mit-considers-offering-modules-instead/54257>

continually would be easier than redesigning the entire course. And professors are receptive to the idea with a quarter of MIT professors suggested that their classes could benefit from a modular approach.

Where Do We Go From Here?

With distribution being either online, face to face, or a blended version of the two, the individual course could be the unit of content over the degree itself, forcing universities – the record labels of education to unbundle. This would reduce entry barriers and could spark the end of the dominant knowledge distribution system where new courses and programs launch not to strengthen the bundle, but rather because the product will support itself in an unbundled model. So, what would change if these advances were to happen?⁴⁹

- Universities will be masters of curation, working as talent agencies. They'll draw royalties and license fees from the content professors create and curate. In many ways, the role of the best universities will become even more focused on identifying, investing in, and harvesting the returns from great talent and might increasingly compete as content creators against some of today's large publishers. And distribution platforms that curate content will do well, commanding both economies of scale and scope.

⁴⁹ UV Letters. (n.d.). *University Ventures Letters*. Retrieved August 15, 2012, from <http://universityventuresfund.com/publications.php?title=the-great-unbundling>

- Decreased cost of content combined with increased competition among professors, and lower average ROI for universities per professor, will lead to lower tuition costs and greater choice.
- Great professors with interdisciplinary knowledge—the great curators—will see license and royalty fees go up as they command economies of scale in distribution. Meanwhile, average professors will find their incomes shrinking and their job insecurity growing unless they improve.

Courses due to their iterative nature could be more cutting-edge and could come from a multiplicity of knowledge establishments like libraries, museums and makerspaces based on feedback from cohorts of entrepreneurs, employers, global think-tanks among others. This is a pivotal moment, which will make higher education more iterative and *age-blind (increasing the age differential between students)* for students to gain new skills and refresh old ones, especially when linked to unemployment benefits like they are in Denmark and Switzerland. This will also bring more choice and diversity while leveraging instant feedback to facilitate new learning styles and focal interests.

With a plethora of content being available, the shift is still at the genesis. It will have its fair share of skepticism and opposition as *“many stand to gain from protecting the status quo. But leveraging this wave to enact positive and permanent change is vital”* argues David Blake⁵⁰. But this creative destruction is necessary to unlock the dominion of knowledge.

⁵⁰ Blake, D. (n.d.). Interview with David Blake: The Future of the Degree. (ONLINE) *Harvard College Tech Review*. Retrieved March 26, 2013, from <http://harvardcollegetechreview.com/2013/future-of-the-degree/>

Hybridity (Orbital Thinking)

Innovation is born at the border of disciplines.

Our approach towards our careers has been fairly similar over the past few decades. The objective was to be highly trained specialists and work all the way to the top of the company or industry. But this approach may no longer be sustainable enough to tackle the trans-disciplinary nature of the problems we have today or the ambiguity it comes with. Undeniably, expertise in a vertical area is essential, but in a rapidly changing world, it is the highly specialized skills that become obsolete more quickly. So, instead of purely focussing on vertical growth, maybe the focus should be on an **orbital** approach to growth instead. An approach that comes with a certain level of expertise in an area and orbiting around to other areas of study to culminate in a unique combinations of insights. Invariably diversity creates creativity and drives innovation; and this approach will bring breakthrough ideas, assorted interactions and insights through observing relationships between diverse disciplines. It could possibly even lead to new areas of study and a creative convergence between arts and science.

Heather Wilson from The Rhodes Scholarship concurs⁵¹ – *“High-achieving students seem less able to grapple with issues that require them to think across disciplines or reflect on difficult questions about what matters and why. Universities are producing top students who have given very little thought to matters beyond their impressive grasp of an intense area of study. Sadly, it’s not a single, anomalous*

⁵¹ Wilson, H. (2011, January 23). (ONLINE) Heather Wilson - Our Superficial Scholars. Retrieved November 3, 2014, from <http://www.washingtonpost.com/wp-dyn/content/article/2011/01/21/AR2011012104554.html>

group of students but rather a trend. Perhaps our universities have yielded to the pressure of parents who pay high tuition and expect students, above all else, to be prepared for the jobs they will try to secure after graduation.”

We seem to be living in silos while the world has become more multi-faceted. The notion of a specialist boasting the job security and reputation may merely be an illusion. So, how might one channel the system away from *siloesd* thinking towards orbital thinking?

*“We need to train our youth to be **Hybrid Thinkers** because if you want to innovate, you need to be one part humanist, one part technologist and one part capitalist”* says Dev Pattnaik, Founder of Jump Associates⁵². Hybrid Thinking is using a human centered approach and merging experiences in different fields – contrary the increased specialization or the *siloesd Thinking* system we have today. *“We live in a society that prizes depth in a single field of research over breadth in multiple areas. Innovation, however, demands that you see the world through multiple lenses at the same time, and draw meaning from seemingly disparate points of data”*, he continues. Therefore, Hybridity is much needed to break the *siloesd model*, as the degree of complexity of the ‘wicked’ problems we’re facing in the world are too labyrinthine for any one skillset to handle. It requires multi-faceted and experiential teams of people or Hybrid Thinkers.

Multiple futurists have forecasted the need for breaking down these silos as well.

The Institute for the Future states that *Transdisciplinary* skills⁵³ are one of the

⁵² Pattnaik, D. (n.d.). (ONLINE) Forget Design Thinking and Try Hybrid Thinking. Retrieved November 3, 2014, from <http://www.fastcodesign.com/1338960/forget-design-thinking-and-try-hybrid-thinking>

⁵³ Anna Davies, Devin Fidler and Marina Gorbis. “Future Work Skills: 2020”. (ONLINE). Institute for the Future, 2010

most important skills that will reshape the landscape of work in 2020. Meanwhile, Arup's report on the Future of Education asserts, "*Institutions will need to focus on teaching transversal competences and on the provision of facilities and courses that support cross-pollination and a breakdown of silos. Holistic, inter-disciplinary learning will also be a key feature of future studies, as systemic thinking becomes standard practice in business and industry.*" For all this, new higher education programs that bring diversity of perspectives and cross-disciplinary thinking into their communities need to emerge.

The Ingredients (Key Takeaways)

A Major Problem

- *A university major* is not a sustainable option. Most students either switch their majors or end up working in fields completely unrelated to their major.
- Students may not be clear about what their future field is, but almost all of them have a problem or a life-question calling for their attention that they want to resolve.
- Some questions so complex or encompassing that no single major could help solve
- Thus, '*What's your major?*' should be '***What's your mission?***' -- not for the career trajectory but the reasons behind it.
- Academic requirements clubbed with **impact requirements** making students more engaged and accountable; an epitome of learning.

Unbundling

- We've been increasingly learning from informal sources but we always revert back to the context of formal education
- But capturing and leveraging the informal sources could **open up patterns for better job opportunities, self-discovery** et al that GPAs just can't provide.
- Degreeed makes this possible, **making the learnings searchable, verified and measurable.**
- Life-long learning is vital as shelf-life of the degree is shrinking. (*Only 5 years*), more people are now mal-employed (*employed without any use of their degree*) and with the increased risk of automation (*47% of all occupations at risk in next few decades*)
- Universities have also failed to predict future work patterns and are unable to assist with students' self-discovery process. This leads us to the **Open-loop Concept**
- Here, university is a **6 year journey (over a lifetime)** instead of 4 years during ages 18 - 22.
- Students gain knowledge -- acquire work experience - return to accelerate or pivot career path. (*The loop repeats*)
- **Unbundling:** A modular form of a previously static/inflexible model
- By unbundling education, degrees would be assembled from a collection of the best courses from various universities.
- It would make teachers more collaborative, improve quality, could be delivered either face to face, online or a blend of the two.

- The course could be the unit of content over the degree itself enabling other knowledge distribution systems to start their own courses (*think-tanks, companies, makerspaces, and libraries*) based on feedback and needs of the system.
- Unbundling may turn universities into talent agencies and masters of curation investing and identifying talent and command new economies of scale.
- Finally, it will **make courses more iterative, cutting-edge** and shift the dominion of knowledge.

Orbital Thinking

- In times of rapid change, we need to shift from an unsustainable *siloed* thinking in our learning approach to a more **trans-disciplinary orbital thinking** to help us deal with the complexity of the problems we have today.
- Orbital Thinking is an approach that comes with a certain level of expertise in an area and orbiting around to other areas of study to culminate in a unique combinations of insights
- It is the highly specialized skills that get obsolete quicker and it is **the varied experiences and insights that foster creativity and innovation.**
- *“Sadly, universities are not training graduates that way and our society prizes depth in a single field of research over breadth in multiple areas. Innovation however demands that you see the world through multiple lenses*

at the same time and draw meaning from seemingly disparate points of data.”

POSITIVE NON- CONFORMISTS

With the changing tides in education, it may not be enough to graduate with a single discipline without some level of understanding of some of the other disciplines. For this, the curricula needs to nurture cross-disciplinary learning and orbital interactions. If not, new academies will manifest from this need and from their agile nature, experiment beyond the capacity of higher education institutions.

And this is already happening. These academies with their agility, are questioning the purpose of education, pivoting new models to address education's most pressing problems. This *startupesque* (a startup style, experimental and cutting-edge) ethos is paradoxical to the concretized culture that institutions adhere to, and it brings the much needed agility to draft the landscape of the future of higher education.

And it's about time, considering that we spend 1/5 of our productive life-hours in formal education. When that thought sinks in, the education style becomes a philosophy, human expression, freedom, and life itself. There seems to be a push directly and indirectly to turn the age-old system on its head.

The Minerva Project

At Minerva, the new cutting-edge four year university program, as opposed to lecture halls, all the teaching takes place in intensive, interactive seminars conducted online by global experts. *“We don't necessarily know how to teach you to be a better orthodontist or a better tax accountant. We innovate in teaching you how to think, how to be creative, how to communicate effectively – and how to lead. Too much time at college is spent on disseminating knowledge which is already freely available; too much money is spent on costs that have nothing to do with student outcomes”*, says founder Ben Nelson.⁵⁴

“Students don't need universities to teach them history, chemistry, and political science”, Nelson says. *“They need universities to teach them how to think.”*

Minerva's approach emphasizes on interpreting patterns and insights from the knowledge acquired to change the way students perceive the world rather than teach *'hard skills'* for which they are encouraged to find free lectures online.

Students only focus on three areas in their first year; critical thinking, creative thinking and effective communication which includes empirical analysis rhetoric, logic and reasoning. They then select their major, although all of their classes would be interdisciplinary like “Solving Problems with Algorithms” or “Art for Political and Social Change”. They take part in field trips in real settings such as

⁵⁴ Walker, T. (2014, July 24). (ONLINE) Will The Minerva Project - the first 'elite' American university to be launched in a century - change the face of higher learning? Retrieved November 12, 2014, from <http://www.independent.co.uk/news/education/higher/will-the-minerva-project--the-first-elite-american-university-to-be-launched-in-a-century--change-the-face-of-higher-learning-9624379.html>

the Alcatraz tour with a prison psychologist. Finally, they're asked to create something novel from their learning, rather than just a thesis. For instance, if they're studying politics, for instance, they might draft a law and try to get it passed⁵⁵. Students are also sent to another global city including Berlin, Hong Kong, London and Mumbai⁵⁶. *"We didn't want them to be trained just for some profession or particular kind of academic niche,"* says Dr. Stephen Kosslyn, Minerva's founding dean and a former Harvard and Stanford professor. *"We wanted them to have the intellectual tools to succeed at jobs that don't even exist yet."*⁵⁶

Nelson's ambition is to create not only a functioning new model for university education, but a university to rival the Ivy League and he's secured \$25 million in seed funding to make this a reality. It is free to attend for the first cohort and costs a fraction of the cost of going to a top college like Harvard, although it is twice as selective. *"The primary motivation is to impact systemic change in higher education on a global basis,"* he stresses. *"The only way to do that is to come in at the top. If you create a perfectly OK university that does things differently, nobody cares. In higher education, everybody looks up."*⁵⁷

Nelson was frustrated from his days at Penn State where although his suggestions to reform the curriculum were well received, he was told that they would never be implemented. Now, the reactions he receives from academics is mostly of envy.

⁵⁵ Lapowsky, I. (14, October 27). (ONLINE) This University Teaches You No Skills—Just a New Way to Think | WIRED. Retrieved November 13, 2014, from <http://www.wired.com/2014/10/minerva-project/>

⁵⁶ Wood, G. (2014, September 1). (ONLINE) The Future of College? Retrieved November 13, 2014, from <http://www.theatlantic.com/features/archive/2014/08/the-future-of-college/375071/>

⁵⁷ Walker, T. (2014, July 24). (ONLINE) Will The Minerva Project - the first 'elite' American university to be launched in a century - change the face of higher learning?

“They recognize the utility and value of what we’re trying to do and appreciate the effort, but also understand it’d be extremely difficult for them to revise their curriculum to do what we’re trying to do. There’s a lot of legacy, which makes things hard to change”, he says.⁵⁵

NuVu Studio

The brainchild of MIT alumnus Saeed Arida, NuVu is a school where students are exposed to the collaborative, experimental, and demanding design process guided by coaches that include local experts such as doctors, engineers, and graduate students from MIT and Harvard University. For effective teaching, NuVu also combines instructors with mixed backgrounds — such as pairing a filmmaker with an engineer, or a doctor with an architect and connects students to exciting research projects from universities and think-tanks. Over an eleven week course, students attend two week studios under themes which include *science fiction*, *health*, *home of the future* and more. Here, students go through critiques from the coach, constant documentation of progress and prototyping using 3-D printers, design software, art and photography equipment and the like.

In the *‘do-it-yourself prosthetics’* studio, students developed a 3-D printed prosthetic hand for children under age 12 with interchangeable cylinders to fit a brush, pencils, and other artistic utensils. *“The feedback we’re getting is they don’t necessarily just want a hand,”* claims Arida. *“These kids don’t have a hand from the beginning, so they can have something that is different. This is pushing prosthetics into a direction that’s not necessarily literal.”*

After an intense design process, each studio ends with students presenting their projects to a jury of entrepreneurs, designers and subject matter experts for validation. Students go through a portfolio-based assessment that highlights the student's growth over time and the development of key academic and life skills (*creativity, critical thinking, collaboration, communication, research, quantitative reasoning and analysis*). The approach and skills that employers have been eager for in university students.

So far, over 400 hundred students have produced over 130 projects creating robotic arms, websites, board games, modular shelters, sustainable and futuristic clothing, medical devices and documentaries. Many projects have been integrated in the real world including a medical device that expands and improves upon research to reduce tremors caused by Parkinson's disease and has already begun clinical trials in a hospital. They launched in Bangalore, India last year and are looking to expand internationally shortly due to a lot of interest in the model.

Stanford 2025

Many have attempted to transform education but merely progressed beyond tinkering with the structure, curriculum, and systems rather than regenerating the university from its roots. The Strategic Foresight and Innovation Team at Stanford University produced a foresight study on the future of Stanford specifically in 2025 where they've imagined the reinvented avatar of the University for this era. One of the breakthrough ideas is:

Paced Education ⁵⁸

In this scenario, four years of university in a *siloes* setting of a one size fits all, turned into six years and three phases of varied lengths based on the individual readiness of the students. This would allow them to explore and transform at their own pace.

Calibration (6-18 Months)

Calibration offered hundreds of short (one day to one week), immersive, introductory experiences designed by faculty and practitioners, so students experienced a wide range of subject areas, learning models, and career trajectories. Students could take up to 18 months to sample interest areas, self-reflect, find learning gaps, and build the confidence to move forward with intention.

Elevation (12-24 Months)

Elevation took students in a deep-dive into a content area with a singular focus. Students enter the Elevation phase by coordinating with their self-selected **personal Board of Advisors** composed of academic and personal mentors at the new living and learning quarters called *LivLerns* in order to foster meaningful relationships between professors and students.

⁵⁸Paced Education. (2014). (ONLINE) Retrieved November 13, 2014, from <http://www.stanford2025.com/paced-education/>

Activation (12-18 Months)

Activation was a time to apply skills and knowledge in a range of different modes. Students try on career vectors while still within the context and the security of the university. Here, students translated their knowledge to several real-world applications allowing them to exercise and iterate upon their academic knowledge in the context of internships, service projects, high-caliber research, and entrepreneurship.

The Ingredients (Key Takeaways)

Minerva Project

- A four year university degree taught through online seminars by global experts. Focus on **leadership, critical and creative thinking and effective communication** and not on hard skills
- All **classes interdisciplinary** (*Ex: Solving Problems with Algorithms*), exposure to real settings (*Ex: Field trips in prisons with prison psychologists*), **encouraged to build something** novel from their learning and launch it. Students are sent to another global city (*Ex: London, Mumbai, Hong Kong*)

The program is built to cultivate intellectual tools to succeed at jobs that don't even exist yet.

NuVu Studio

- Process: ***Mentoring -- Constant Progress Documentation – Prototype – Critique – Launch -- Repeat***
- Students coached by experts, teamed up with instructors with mixed backgrounds and connected with exciting research projects from universities and think-tanks.
- Two week studios under a particular theme (*Ex: Health Home of the Future*)
- Go through a portfolio based assessment that highlight the student's growth over time and the development of key academic and life-skills (*creativity, critical thinking, collaboration, communication, research, quantitative reasoning and analysis*) - All the skills that employers have been craving for.
- Students present their projects to a jury of entrepreneurs, designers and subject matter experts.
- Over 130 projects including robotics, websites, board games, modular shelter, sustainable and futuristic clothing, medical devices and documentaries.
- Many integrated into the real world and created breakthroughs in healthcare.

Paced Education

- Four years of university (*four one year blocks*) becomes 6 years (*3 phases of varied lengths*).
 1. **Calibration:** Short, immersive and introductory experiences to test wide range of areas, career trajectories and learning models.
 2. **Elevation:** Deep dive into content area, build personal board of advisors.
 3. **Activation:** Apply the skills, try various career vectors, and iterate academic knowledge through internships, service projects, research and entrepreneurship.

PART II - THE INGREDIENTS

THE GAPS, NEEDS & MARKET

This section will cover where the gaps, needs and opportunities lie. Then, it will highlight how similar the problems are in different parts of the world, all showing patterns of massive complexity, apathy or helplessness involving more than 60% of the world's population.

INDIA^{59 60 61}



1 in 3 graduates under 29 is unemployed

Only 1 in 3 graduates is employable.

1 in 3 under the age of 15

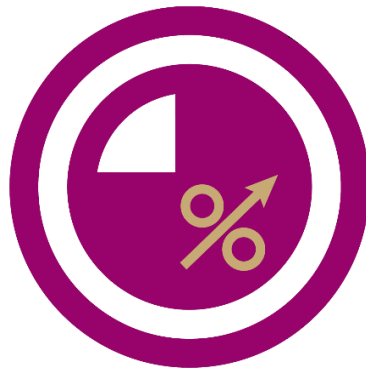
Figure 1: Indian Education Status

⁵⁹ Sharma, Y. (2014, July 14). What do you do with millions of extra graduates? Retrieved November 16, 2014, from <http://www.bbc.com/news/business-28062071>
- Sources: from Labour Ministry report

⁶⁰ 'Among graduates, only 30% job worthy' - The Times of India. (2014, January 30). Retrieved November 16, 2014, from <http://timesofindia.indiatimes.com/india/Among-graduates-only-30-job-worthy/articleshow/29570361.cms>
- Source: Assessment by the National Skill Report 2014 of 100,000 students.

⁶¹ Mani, R. (2013, March 25). What Are You Doing to Fix India's Broken Education System? Retrieved November 16, 2014, from <http://india.blogs.nytimes.com/2013/03/25/what-are-you-doing-to-fix-indias-broken-education-system/>
- Source: International Monetary Fund

*“The entire world has a social and economic stake in ensuring that India provides top-quality education to its children.”*⁶⁰



25% of global workforce by 2030.

Increase by over 100 Miln. 10 times as much as China.

Youth could boost GDP additionally by 2% annually

Figure 2: Indian Education Status

A large number of graduates from India are unable to fulfil their ambitions, and ultimately, unable to contribute to the economy which experts term as a *gargantuan national crisis*. **The National Skill Development Corporation believes that more than 500 million skilled professionals will be required across sectors by 2022, and India is currently equipped to train only three million.**⁶² This shows the significance of quality education and entrepreneurship for the economic growth in India. *“Indian students spend a lot of time on their degrees and ultimately realise that these degrees are not going to provide a passport into the private sector jobs,”* contends Prof. Jeffrey, an Expert on India's unemployed youth (Oxford)⁶³

⁶² National Skill Development Policy. (n.d.). Retrieved January 21, 2015, from <http://labour.nic.in/upload/uploadfiles/files/Policies/NationalSkillDevelopmentPolicyMar09.pdf>

⁶³ Sharma, Y. (2014, July 14). What do you do with millions of extra graduates? Retrieved November 16, 2014, from <http://www.bbc.com/news/business-28062071>
- Sources: from Labour Ministry report

“The Indian formal education system and other various formal structures have not let street-level creativity and innovation permeate. The Indian education system is too didactic and frozen in the industrial revolution whereas the world has moved ahead” argues educator and artist Raghava KK.⁶⁴

CHINA ⁶³

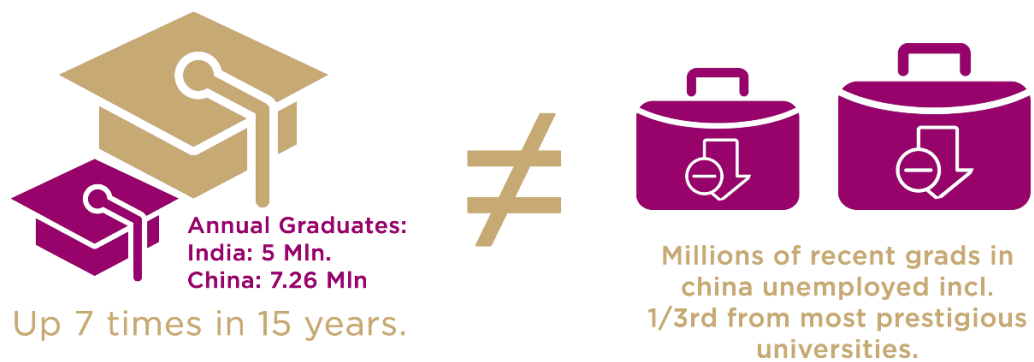
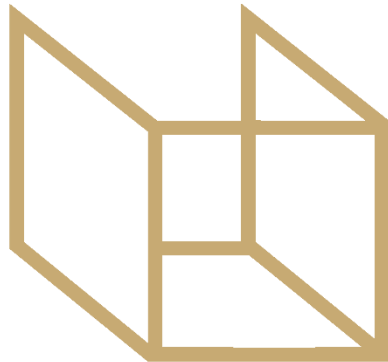


Figure 3: China Education Status

To counter this, China's education ministry wants to convert 600 universities into polytechnics to reduce the emphasis from academic and theoretical subjects and offer more technical and employment-related courses.

⁶⁴ KK, R. (2014, March 11). Creative Gaga. Retrieved November 26, 2014, from <http://www.creativegaga.com/articles.php?act=details&aid=176>

UNITED STATES: ⁶⁵



Only 56% of students graduate in 6 years.

Lowest completion rate among 18 countries (OECD)

Drop due to lack of funds, interest, mentorship, and real world relevance.

Figure 4: United States Education Status

A silver lining is that many teenagers are self-directed and interested in pursuing entrepreneurship and 63% believe that entrepreneurship should be taught in college.⁶⁶

AFRICA ^{67 68 69}

11 Million will join labour force annually for the next decade



50% aged under 25.
By 2025, 50% aged 15-34 would attain sec. education

50% of women & 40% of men not employed. (Rate highest among college grads)

Only 1 in 4 expected to work for wages in their lifetime.

Figure 5: African Education + Employment Status

⁶⁵ Hansson, B., & Charbonnier, E. (2010). Education at a Glance 2010. *Education at a Glance 2010*. The Harvard study's assertions are supported by data collected by the Organization for Economic Co-operation and Development for its report "Education at a Glance 2010."

⁶⁶ Meet Generation Z. (2014, November 18). Retrieved November 26, 2014, from <http://www.northeastern.edu/innovationsurvey/generation-z/index.html>

⁶⁷ Priorities to Address Africa's Youth Employment Challenge. (n.d.). Retrieved November 14, 2014, from <http://www.worldbank.org/en/region/afri/publication/new-report-outlines-priorities-to-address-africa-s-youth-employment-challenge>

⁶⁸ Filmer, D., & Fox, L. (2014). *Youth Employment in Sub-Saharan Africa*. World Bank Publications.

⁶⁹ Devlin, K. (n.d.). Reducing Youth Unemployment in Sub-Saharan Africa. Retrieved November 15, 2014, from <http://www.prb.org/Publications/Articles/2013/youth-unemployment-africa.aspx>

Education opens the doors to well-paying jobs, improves longevity, community engagement and other wide-range benefits to society⁷⁰. But they may never be realized by graduates in sub-Saharan Africa because the rapid increase in educational attainment has come at the expense of quality. This is especially the case with producing hireable skills preventing young Africans to contribute to their fast evolving economy and the situation will continue to worsen if not corrected.⁷¹ Some of the recommendations from UNESCO and the International Labour Organization include specific programs that target specific youth population such as disadvantaged young women, to boost their skills and employability⁷². They also recommend that governments, the private sector, and international donors pursue integrated, comprehensive policies and strategies that create jobs for young people and improve the transition between college and career.

EGYPT AND THE MENA REGION:

Currently the Middle East and North Africa are amongst the regions with the world's highest youth unemployment. One in every four young person is

⁷⁰ What are the Social Benefits of Education? (2013). Retrieved November 14, 2014, from [http://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%2010%20\(eng\)--v9%20FINAL%20bis.pdf](http://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%2010%20(eng)--v9%20FINAL%20bis.pdf)

⁷¹ Townsend, J. (n.d.). From Classroom To The Real World: How Young People In Africa Can Unlock Limitless Opportunities. Retrieved November 14, 2014, from <http://www.forbes.com/sites/ashoka/2014/10/27/from-classroom-to-the-real-world-how-young-people-in-africa-can-unlock-limitless-opportunities/>

⁷² UNESCO, Youth and Skills; and International Labor Organization, Global Employment Trends for Youth 2012 (Geneva: International Labor Organization, 2012).

unemployed and this is particularly noteworthy because over 75% of its population is under 25.

In Egypt⁷³, three quarters of all unemployed people are between 16-29 years of age and 82% of them hold a diploma or a university degree.⁷⁴

COUP DE GRÂCE

All the above regions cover 60% (4 Billion) of the world's population. If the needs of even a fragment of this population are addressed, then it would have a ripple effect on their economies.

The bigger dilemma with all this is that even with those employed, only 13% of employees are engaged at work worldwide and the numbers are even lower in the emerging world in the MENA region, sub-Saharan Africa and Asia according to Gallup global survey of 142 countries⁷⁵.

Therefore, the key to addressing this global unemployment crisis is through a robust blend of better education models focuses on the human potential.

⁷³ The Central Agency for Public Mobilization and Statistics (CAPMAS).

⁷⁴ Haneef, A. (2014, June 29). Can reality TV be a force for social change? Retrieved November 16, 2014, from <https://www.youtube.com/watch?v=dftA6aV85C0>

⁷⁵ Worldwide, 13% of Employees Are Engaged at Work. (2013, October 8). Retrieved November 14, 2014, from <http://www.gallup.com/poll/165269/worldwide-employees-engaged-work.aspx>

All credits for the icons used in the Infographic goes to their respective creators.

THE RESEARCH QUESTION

Although the solution must be able to address the needs of target areas mentioned above and applicable in other environments, parts of the solutions and the questions would be optimized for and tested for India first.



Figure 6: Problem Tree

The Problem Tree

ISSUE

The inability of higher education to optimize itself for the future.

CAUSES

- Lack of cohesion and communication among stakeholders.
 - Expectation mismatch between industry and academia. Focus still on GPAs and quantitative skills from the universities' front whereas industry wants **creativity, ingenuity, problem solving skills, etc.**
 - Hindering the shift towards necessary skills and competencies.
- Value System/Societal Mindset (Educational institutions are a holy grail)
 - Lack of institutional accountability towards student progression.
 - Lack of awareness from the institutional front on the gravity of the problem and issues such as shrinking shelf-life of the degree, disruptive models and technologies et al.
 - Lack of better alternatives/substitutes to replace it in its current form.

EFFECTS

- Global unemployment, underemployment and mal-employment.
 - Societal, economic and social deterioration.
- Dissipation of human potential/resources.
 - Quarter-life crisis. (Disengaged and confused youth)
 - Lack of productivity and depression
- 'Siloed' or homogeneous workforce from lack of an interdisciplinary framework.
 - Lack of societal/intellectual progression and development.
 - Universities turning into glorified trade schools.
- Disruptive and alternative models/academies arising from the need for a better intellectual framework.
 - Rise in better MOOC (Massively Open Online Courses) infrastructure.

- A lab model for higher education, constantly pivoting.
 - Accelerate the rate of change needed for higher education.

The Research Question:

How could higher education take on different forms in order to optimize itself for the future?

How could higher education take on different forms in order to optimize itself for the future?

Higher Education: Universities or any knowledge institutions delivering quality educational content.

Different forms: Online, Live or Blended.
Democratizing quality content for the masses and even fringe communities.

Optimize itself: Bridging the industry-academia (college-career) gap. Switching the focus towards the entrepreneurial mindset, skills needed by the industry and to thrive in this knowledge economy that could not be deemed obsolete by technology.

Figure 7: Problem Framing + Research Question.

THE DESIGN CRITERIA

“Most of us have deeply embedded ideas about what’s “right” for education. But when you look at the world of education through the lens of design, you start to see that there isn’t one right answer, there are many. The (education) system is actually an outcome of millions of different solutions, organizations, priorities, and experiences. As designers, our job is to understand the conditions in any given situation deeply enough to be able to find new, relevant solutions for a particular context, need, or challenge.”⁷⁶

- Tim Brown, IDEO



Figure 8: Solution Ingredients + Design Criteria.

⁷⁶ Brown, T. (2013, November 13). A Design Lens on Education. Retrieved November 14, 2014, from <http://designthinking.ideo.com/?p=727>

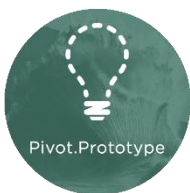
These badges have been built from and inspired by the contents of the first section, validated by reports, experts and best practices. The following will shed more light on why they're important and how they should be used.



Fringes: Someone at the periphery of their communities. It may include refugees, convicts, geographically or socially isolated, low-income and other marginal populations. It is this fringe population that is in severe need of quality higher education to deeply impact their lives. Therefore, the solution must be built keeping them in mind.



New Success Metrics: GPAs are starting to be overlooked by employers. This is because transcripts do not always show the true picture of the capabilities and the potential of the student as much as portfolios do. But just portfolios will not suffice. Insights (*formal and informal*) need to be captured to build patterns for better opportunities, self-discovery and growth over time. These metrics should showcase what the student could offer the world through the culmination of courses, skills, ideas, interactions and experiences.



Pivot. Prototype: It's time to instill a maker-mindset. The Maker Movement and its *Do-It-Yourself* philosophy addresses problem-solving and innovation and is a catalyst for rapid ideation, experimentation and creation. By tinkering, pivoting, designing and prototyping

physical/virtual objects, media or systems over the course of their education, students are better prepared to face pressing challenges head on.



Mentorship: It should be a vital cog and a recurrent element in education. Although students hold themselves accountable for their learning, mentorship should help them on a personal/collective front with unbiased perspectives, help embrace vulnerability, help optimize their learning experiences and amplify their potential, competencies and impact.



Unbundling: A modular form of a previously bundled/inflexible model. By unbundling education, the course would be the unit of content and degrees would be assembled from a collection of the best courses from various universities making teachers more collaborative, more iterative, and cutting-edge. The solution should be such that it could be broken down into fragments that manifest into multiple combinations of meaningful learning customized to the needs and challenges of each community.



Orbital/Hybrid thinking: The most interesting things happen at the intersection of disciplines. In times of rapid change, it is the highly specialized skills that become obsolete quicker. Therefore, we need to shift from an unsustainable *siloed* thinking in our

learning approach to a more **trans-disciplinary *orbital thinking***. Because it is the varied experiences and insights that foster creativity and innovation.



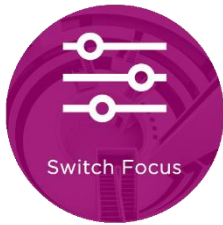
Startup Ready: The intention is to not just acquire and impart existing knowledge but create new pathways of knowledge and build something novel out of the experience. The key is to assimilate the entrepreneurial mindset through all of the courses/projects that could be integrated through entrepreneurship, intrapreneurship or even personal development towards change and renewal.



Reduce Friction: Due to our resistance to change, any solution must be built in without demanding a major behavioral change. In this case, educating people by fusing into existing habits and systems. It must also complement rather than collide with the existing system through co-creation to ensure maximum scalability.



Age-blind: In an ever-changing world, continually topping up on human capital to remain relevant and competitive is essential due to the increasing obsolescence of the university degree. Therefore, a solution must cater to people of various age-groups and accentuate on life-long learning



Switch Focus: The curriculum is not addressing the skills needed by employers and is out of touch with today's challenges. There needs to be a shift in focus towards experiences, mindsets and much needed skills like *critical thinking, leadership, communication, project management, creative thinking, teamwork and problem solving.*



Adaptable: The solution in order to create impact on a global scale should morph itself to its local context. No single uniform solution will be applicable to address educational conundrums as each demography and geography has its own set of challenges and priorities.



What's Your Mission? : *A university major* is not a sustainable option. So, flipping the idea of a *major* into a *mission*, problem or a life-question that students want to resolve or how they want to augment the world is a better way to approach education. Designing a system around this approach makes learning more responsible and engaging while providing a trajectory of what is needed to be learned and impacted.



Future Proof: Higher education institutions have been unable to predict future work patterns nor equip students with the necessary skills, competencies and the right mindset towards their desired futures. The solution should prepare students for skills needed for the uncertain future, for entrepreneurs and employees of tomorrow.



Interdisciplinary: Most of the problems we face today are transversal or intertwined. It requires a generic yet a cross-pollination of ideas, competencies and subject matter. This provides a systemic view of the complexities of the system, their relationships and their collisions giving rise to the intersection economy.



Blended: The digital age and the media has the potential to impart knowledge and educate on an enormous scale, therefore, harnessing this is essential. But for healthy and responsible learning, engagement should occur on-screen and off-screen. In other words, a blended approach between the on-screen and live learning.

PART III: BUILDING THE HUMAN ACCELERATOR.

An unbounded vision for the future of higher education



Figure 9: Limitless Institute Logo

“Our deepest fear is not that we are inadequate. Our deepest fear is that we are powerful beyond measure. It is our light, not our darkness that most frightens us. As we are liberated from our own fear, our presence automatically liberates others.”

- Marianne

Williamson

I believe that the biggest untapped resource in the world is human potential. We are also in the middle of a human potential crisis and at the pivotal point where everything may permanently alter. And the only way to change the world and

unlock the future of humanity is by augmenting people's lives, their hearts and minds, changing behavior; because the world doesn't change. People do.

The Limitless Experience

Imagine an institution that purely focuses on the human potential – on building a better you. This is **the Limitless Institute – The Human Accelerator**.

The vision is not to build a university or a school but to circumvent the old structures of higher education and create new models of learning, taking off from where formal education left. It is to help students find a place to contribute in the world. Its key focus would be on the human in us, helping accelerate human impact and boost human potential. The students would then become *accelerants* themselves through the insights and stories that manifest from the *Limitless experience*.

The Limitless experience is unfolding human potential towards societal change through immersive, integrative and highly modular higher education courses designed and built into existing systems for maximum scalability.

Imagine classes and courses linking up like Lego blocks, building either a unique pattern for students or malleable to bring the user in control, customized to the geographic and the demographic and ever evolving. This Human Accelerator is a

unique learning laboratory designed to impart knowledge, skills, behaviors, competencies, attitudes and values to augment their lives and advance their societies. It is centred on the values of entrepreneurship, social innovation, maker-culture, leadership and creativity.

The Limitless Institute will not offer a degree so that it could promise modularity throughout and iterate whenever necessary. A disposition to lifelong learning is crucial for success in a world of permanent beta. The idea is not be a school/university in itself, but rather a philosophy, an attitude and a way of life -- for systems in severe need for revitalization.

Lego and Da Vinci ⁷⁷

The approach is inspired by Leonardo Da Vinci's technique which he applied to his art and inventions. He would study the various aspects of the subject, list all the characteristic features (*Ex: Eyes, Nose, Mouth, etc.*), parameters and variables, create variations for each of the categories, and experiment with the different combinations and variations until the configuration matched. Many people believe that the Mona Lisa may be a result of this very technique as people find many different expressions in the mix of features on her face.

When rethinking education, the size and the complexity of the problem could be overwhelming because it is viewed as a whole and not as parts and the

⁷⁷ Michalko, M. (n.d.). Creative Thinking Technique: Leonardo daVinci's Ideabox. Retrieved November 14, 2014, from https://creativethinking.net/Anne/DT08_DaVincisIdeabox.htm

relationships between the parts that come together to form the system. If Da Vinci's technique is applied to rethinking higher education, different variables and the combinations that emerge would generate multiple solutions/models customized to the situation, demographic, geographic, etc.



Reality Check (How?)

“The power of storytelling is exactly this: to bridge the gaps where everything else has crumbled.”— Paulo Coelho

Massively Open Online courses have shown their potential of being disruptive, by democratizing higher education, by questioning the relevance of higher education in its current form and proposing an alternative system of delivering quality education globally. But when looking at the practical realities on the ground, it hasn't caused much of the disruption in emerging regions like South Asia, the MENA region and Sub-Saharan Africa due to the lack of infrastructure to support it. Countries like India for instance, has an internet penetration rate of 14%⁷⁸ and the Middle East and Sub-Saharan Africa are not better off either. Finally, the

⁷⁸ India Internet Users. (n.d.). Retrieved November 16, 2014, from <http://www.internetlivestats.com/internet-users/india/>

intended audience - the youth, suffers from this deficiency as setting up the infrastructure may take up to a decade.



What seems to be the outlet or a source for gaining knowledge, biases and insights is through media; particularly television. In India, there are more cellphones and televisions than toilets⁷⁹ and it's roughly the same case globally with 1 to 2 billion people not having access to really good education but rather to cellphones and television according to a UN report.⁸⁰

As a tool to educate, a tool for change?

For thousands of years, storytelling is one of the most powerful mediums we have had. It's been stories of people and things that have inspired us, educated us, formed religions and guided us since the dawn of time. The forms of storytelling have changed constantly but television has emerged as the most powerful of the modern day storytellers. It has broken barriers, transcended language, culture and geographical boundaries, ignited ambitions, built biases and carved pathways for billions globally.

As the world around us morphs at extraordinary speeds, this could be a powerful medium to bridge the education-employment divide and develop new skillsets

⁷⁹ No toilet in half of Indian homes. (2012, March 14). Retrieved November 16, 2014, from <http://www.bbc.com/news/world-asia-india-17362837>

⁸⁰ Deputy UN chief calls for urgent action to tackle global sanitation crisis. (2013, March 21). Retrieved November 16, 2014, from <http://www.un.org/apps/news/story.asp?NewsID=44452&Cr=sanitation&Cr1=#.VGj1ffnF8qT>

that can constantly push, reorganize and reiterate efforts to inform and engage. An opportunity presents itself here, as the only way to create change is not to change to situation but to influence the hearts and minds of people.

The most important skill to learn in this new era is the ability to create your own job. We live in a time where individual success will be tied to entrepreneurial skills and attitude and breakthroughs happen at the borders of necessity and possibility. So, why not broadcast the essentials of higher education, the skills and mindsets needed for future entrepreneurs and employees to succeed in the uncertain future? Could television help advance the entrepreneurial zeal?

As a tool to educate, television could be leveraged for its massive distribution system even penetrating to the fringe populations with ease turning it into the canvas of the largest classroom in the world. Imagine if a television show could provide resources, community, and education to help views engage better with academia, grow as humans, cultivate their ideas and build a repertoire of skills. And with this, could it usher in the emergence of a wildly dynamic, trans-disciplinary future?

Certainly! And the answer is the rapidly growing influence of unscripted television programming – **Reality TV**.



Why Reality Television?

Reality television taps into some of our most basic psychological needs - the need to feel connected to others, the need to feel good about ourselves, and the need to understand social dynamics. Witnessing others' experiences can also be comforting in that they remind viewers that they're not alone.⁸¹ This phenomenon is called *Common Humanity*⁸² - the awareness that the ways in which we personally suffer are shared by other people. This feeling can also build empathy towards themselves, other people and situations.

Most importantly, viewers may also feel inspired by people who overcome obstacles and succeed in the end⁸³ - upward social comparison gives us hope and motivates us to improve ourselves. This is common with transition based reality shows as they bring a juxtaposition of the 'Before' and 'After' picture making it more effective⁸⁴ as viewers start to believe that this could happen to them too. And

⁸¹ Baumeister RF, & Leary MR (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological bulletin*, 117 (3), 497-529 PMID: 7777651

⁸² Eisenberger NI, & Lieberman MD (2004). Why rejection hurts: a common neural alarm system for physical and social pain. *Trends in cognitive sciences*, 8 (7), 294-300 PMID: 15242688

⁸³ Taylor, Shelley E; Lobel, Marci (1989). Social comparison activity under threat: Downward evaluation and upward contacts *Psychological Review*, 96(4), 569-575 DOI: 10.1037//0033-295X.96.4.569

Rose, R.L. *Journal of Consumer Research*, September 2005; vol 32:

⁸⁴ Dornoff, S.E., Hinman, N.G., Koball, A.M., et al. Department of Psychology, Bowling Green State University, Bowling Green, Ohio. *Journal of Obesity*, 2012 May;20(5):993-8.

Crockett, R.J., Pruzinsky, T., Persing, J.A. Section of Plastic and Reconstructive Surgery, Yale University School of Medicine, New Haven, CT. *Journal of Plastic and Reconstructive Surgery*, 2007 Jul;120(1):316-24.

- **Most first-time plastic surgery patients were regular viewers of cosmetic surgery reality TV programs** and said the shows had influenced their decision to undergo surgery.

not only do these shows inspire and give hope, but also paint a picture of what it would be like and how to get there. “*This eventually helps them accomplish more or lead a healthier lifestyle*”, says Mina Tsay, a communications professor at Boston University.⁸⁵

Finally, it could be more effective than lectures as researchers have pointed out that there is a lapse after 10 to 18 minutes of optimal focus no matter how good or compelling the subject matter was. Therefore, it could be an evolution of lectures in some way with a captivating storytelling component, educating viewers without them knowing it.⁸⁶ But reality shows have had a terrible reputation of not being intellectually stimulating. So, building on from the effectiveness of transition-based reality shows, how could a reality show display intellectual transformation over the course of the season?

If this is achieved, it could possibly turn the traditional industry model upside-down. So, instead of broadcasting something inconsequential, the show could unearth the talents and interests of the youth, prepare them for the future, show them how to get to where they want to go, help them monetize their ideas and launch something as leaders that would inspire and unlock the potential their community. All of this without credentials playing a role.

⁸⁵ Why We're Obsessed with Reality TV. (n.d.). Retrieved November 16, 2014, from <http://greatist.com/happiness/why-were-obsessed-reality-tv>

⁸⁶ Middendorf, J., & Kalish, A. (1996, January). The “change-up” in lectures. In *Natl. Teach. Learn. Forum* (Vol. 5, No. 2, pp. 1-5).

Johnstone, A. H., & Percival, F. (1976). Attention Breaks in Lectures. *Education in chemistry*, 13(2), 49-50.

But can a TV show perform the role of reaching millions of people in countries where the education system has pretty much broken down or is not addressing the students' needs adequately?



The best example of a tested reality show for social change would be **Dream & Achieve, (Fekr wa Tallosh)**⁸⁷ from Bamyán Media.⁸⁸ It was watched by over 7 million Afghan watched social entrepreneurs launching their ventures. The series' winner was a plastic recycler from Kandahar whose plant is powered by renewable energy, and the runner-up was a young woman who started a successful jam and pickling business employing hundreds of widows and refugees. Contestants ranged from ex-warlords to small-holder farmers to young female students. Viewers learned about access to finance, marketing strategy, business plan development, and more importantly — that they themselves can rebuild their country. The show turned the spotlight in Afghanistan to an alternative development paradigm — spreading the belief that it is Afghan entrepreneurs who will ultimately make the long-lasting change their country needs. Bamyán Media launched another version of their show in Egypt last year called The Project or El Mashrou3.

⁸⁷ "Fikr-Wa-Talash" – Reality T.V. meets social entrepreneurship. (ONLINE) (n.d.). Retrieved November 25, 2014, from <http://www.global1.youth-leader.org/2012/12/fikr-wa-talash-reality-t-v-meets-social-entrepreneurship/>

⁸⁸ Bamyán Media. (n.d.). (ONLINE) Retrieved November 25, 2014, from <http://bamyán.org/>

The Setting



Stage 1: The Reality Show - The Journey

The setting for this reality show would be a journey in itself. At least for the first edition, it would use existing initiatives and infrastructure to augment them by adding an education layer in them. This way, the show could be executed sustainably with minimal costs. The initiative would be a journey of entrepreneurs and change-makers travelling across terrains for a program. Examples of these are **Unreasonable at Sea, Startup Bus, Ampion, Jagriti Yatra et al.** Here a curated crowd of motivated people with mentors and sometimes investors drive around hundreds, sometimes thousands of miles across various terrains over a few weeks or months. Such programs have been picking up pace over the last few years but haven't been tapped enough to broadcast and leverage these learning journeys.

Jagriti Yatra for instance, aims to target the youth of 'Middle India' (*the proportion of the population who have their basic needs met but don't have a sense of purpose*). 47% of the enterprises that came out of the program started in small towns and villages from the 60% of the participants being from that region. A potential boost to curb the massive urban migration in India.

The Journey is a melting pot for ideas and a great setting for powerful storytelling and personal reflection that comes incomparably with travel. This is for the population at large broadcasting the curriculum through episodes. And because it

is free and the cost per user is negligible, it will be able to democratize quality content to even remote and fringe populations. The journey would also take participants to locations and organizations, see how they run and how they're improved or transformed over the show. These could be non-profits, service industries, neighbourhoods, etc. The model would be made financially sustainable through ad revenues, strategic partnerships and product placement, grants and merchandise.



Stage 2: Collisions

For a blended approach and engaging people off-screen, Limitless would organize meet-up sessions called **Collisions** in different parts of the region. This will build a more intimate relationship with viewers and increase the popularity of the show and the accelerator itself. This results in a positive reinforcing loop or a circular model where variables are acting as feeders to each other.

Collisions could be officially, independently organized or could even be formed en-route during the reality show. Students who want much more out of their reality show experience could join the Collisions for free and trade insights, meet like-minded people to support each other or buddy-up to take on challenges, receive study material and resources (*worksheets, toolkits, freebies, etc.*) and work on projects to enhance their communities tying it back to the curriculum.

As for the participants of the reality show, they could meet and inspire, garner support and advice from the various communities, support their projects and form bonds with them that would transcend the show.



Stage 3: The Accelerants

Limitless will provide access to alumni and curated candidates looking to update their portfolio, support life-long learning, mentorship after or without the program through a **membership model**. This is for students who are either looking for something more than a television show or meet-up or continual development after their accelerator program. The membership model offers students **resources** and **study materials** to dig deeper, **group sessions** to discuss and get peer support and trade skills, access to **events** and **networking** opportunities, information and access to better **job opportunities** and **scholarships** for further advancement. All this for an annual membership fee leading to a *freemium* model.

Stage 4: The Human Accelerator

The final piece of the puzzle is the Human Accelerator, the climax and the pinnacle of the Limitless Institute. As stated earlier, each Accelerator is focused on building better equipped individuals to cope with future challenges and address the priorities of their communities. Hence each accelerator will have its

curriculum and its approach customized to the local region. The accelerator will attract selected applicants who are looking for better exposure and mentorship than the Journey, Collision or the Accelerants model. Students will have access to **alternative credentials, (The Halo), one-on-one mentorship, seed-capital/investment opportunities** apart from **resources, events** and more. This is the top-tier of the freemium model accessible through a fee and some scholarships. Over time, the stories that manifest from the accelerator will feed into the next reality show season and vice versa, resulting in a cyclical model and a positive reinforcing loop.

The Human Accelerator designed to contain elements of all the design criteria (ingredients).

limitlessBangalore

limitlessMumbai

Figure 10: Limitless Institute City Chapters



The Cyclical Model

The entire Limitless Institute model is cyclical being both financially and socially sustainable. Some of the other loops that energize the system include:

- Students who pass through the program who possess exceptional ability and congruence could sign up as mentors or accelerants over time feeding back into the system. For this, they not only gain community service

certificates but also get their membership fee waived and are eligible for scholarships through a gamified reputation based currency.

- The popularity of the reality show and Collision that are free models will market Accelerants and the Human Accelerator, the paid models. This will not only strengthen the freemium model but also feed into the next iteration of the reality show.

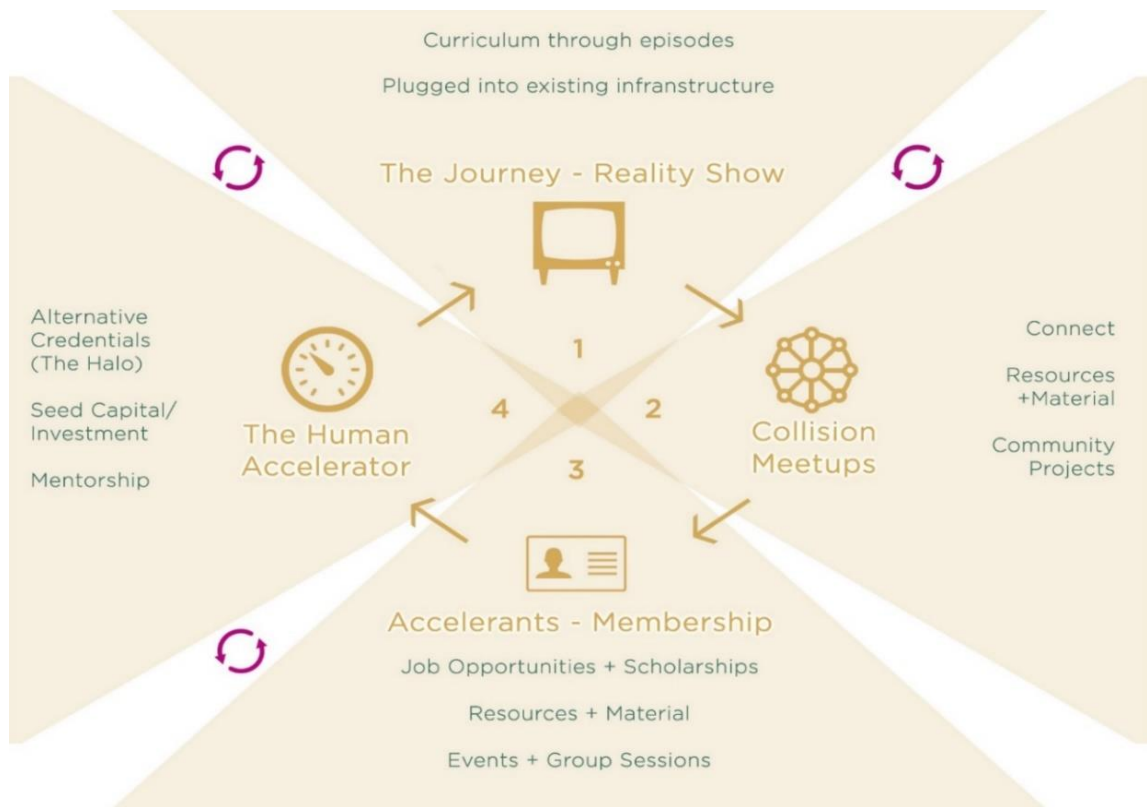


Figure 11: Limitless Institute Cyclical Model

The Experience Journey Map

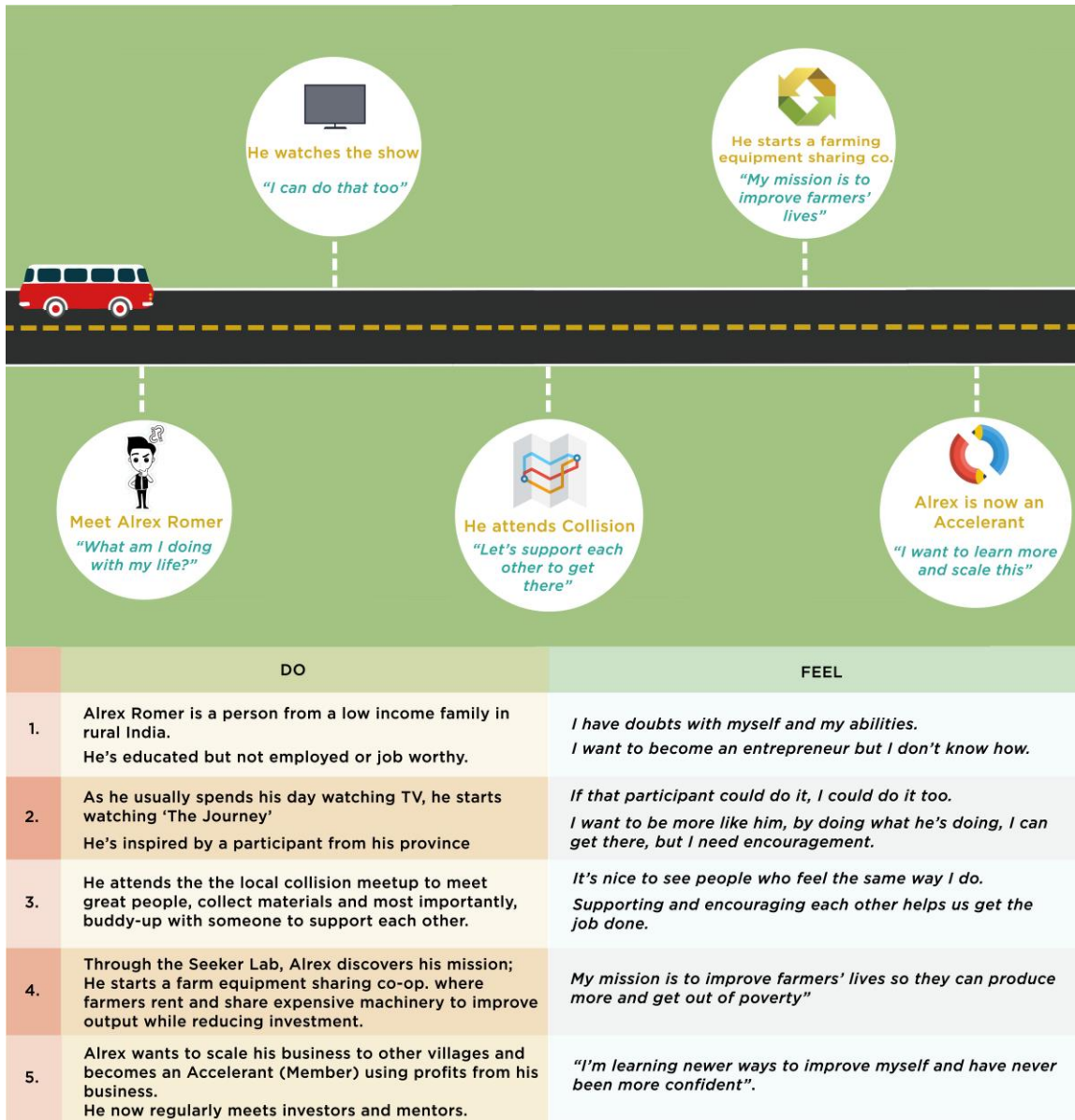


Figure 12: Limitless Experience Journey Map

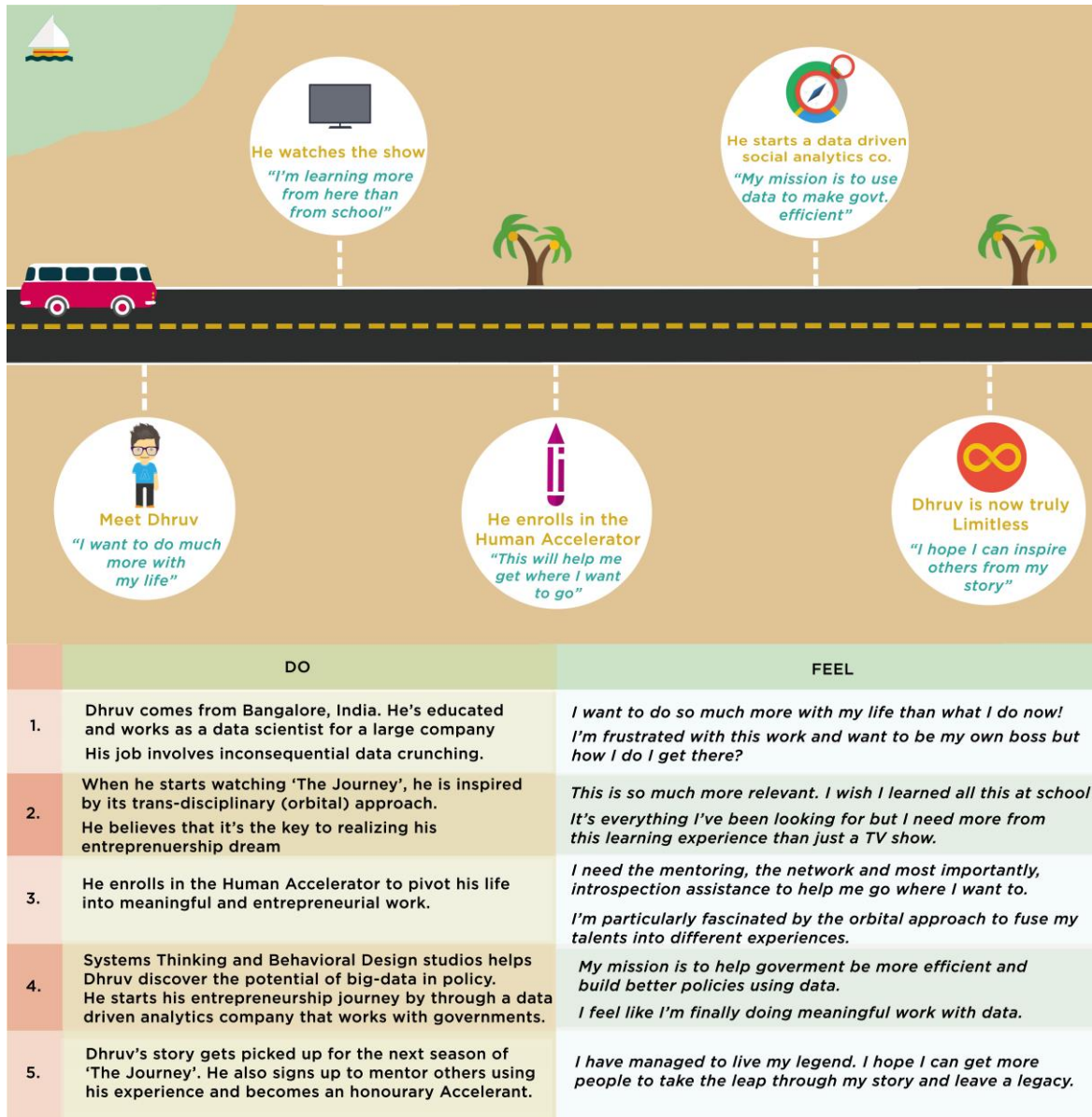


Figure 13: Limitless Experience Journey Map 2

CURRICULUM

We need to bring the three most powerful ingredients of intrinsic motivation into the classroom to reimagine education: play, passion and purpose.

– Tony
Wagner⁸⁹



The Limitless Curriculum is as iterative and modular as the philosophy itself. The course list is non-exhaustive and every course is therefore a feeder to every other course. All the courses are interdisciplinary, intertwined and generic, bringing unique insights, new combinations and an orbital approach to every student to create their own version (Da Vinci + Lego model) of their education within the frames of the Limitless curriculum.



PHASES:

- 1. Self-Discovery Phase**
- 2. Experience Phase**
- 3. Design Phase**
- 4. Reflection Phase**

⁸⁹ Wagner, T. (n.d.). Play, passion, purpose: Tony Wagner at TEDxNYED. Retrieved November 25, 2014, from <http://www.youtube.com/watch?v=hvDjh4l-VHo>

Curriculum Map:

	Self-Discovery	Experience	Design	Reflection
Soul Searching 101	[Yellow bar spanning all four columns]			
The Seeker Lab	[Yellow bar]			
Design for Emergence & Sustainability		[Yellow bar]		
Systems Thinking		[Yellow bar]		
Appreciative Enquiry		[Yellow bar]		
Service Design & Customer Journey		[Yellow bar]		
Get Sticky (Building Tribes)	[Yellow bar spanning all four columns]			
Choice Architecture & Behavioral Design			[Yellow bar]	
Life in Beta (Make-onomics)			[Yellow bar]	
Vitamins & Painkillers			[Yellow bar]	
Leagacy				[Yellow bar]

Figure 14: Limitless Curriculum Map

Soul Searching 101 *(Self Discovery 1 and Continual)*



"All leadership is autobiographical. If I don't know who you are as a person, I don't know who you are as a leader."

- Noel Tichy



The course is student driven but guided by mentors throughout to assist with their self-discovery process. It starts with **Storification**: First, students will use transmedia storytelling techniques to build a narrative about their lives, helping catalogue stories that shed some light on what makes them special, their unique strengths, their history, and their desired future. This could be a very powerful tool to connect with the hearts and minds of

people and to showcase their skills as leaders. Over iteration cycles, this will get more crisp, repeatable and memorable.

Personal Branding. Personal Branding is the new resume. Particularly for the generation where job-hopping is frequent⁹⁰, personal brand and reputation would eventually outlive their professional lives. There is no longer the separation of personal and professional profiles; they have merged into one. The beliefs, biases, talents and passions, all manifest into the personal brand. This will be complemented with a logo and a medium to showcase the brand. Each student will optimize and share their brand and stories on their website to build a robust online clout. An essential to thrive in the next decade according to futurists.⁹¹ Each will then make a relevant and engaging video not about who they are but what they can offer the world.

The course will then employ **Resource Mapping** by building customized databases of people, industries, companies, ideas and collectives to zero-in on their passions and goals. This will also help build the dream-team for each of the students; their personal board of directors and mentors.

⁹⁰ Job hopping rate highest in India: Survey. (n.d.). Retrieved November 16, 2014, from http://articles.economictimes.indiatimes.com/2010-10-13/news/27585022_1_indian-employees-india-scores-findings-of-factual-job

Job Hopping Is the 'New Normal' for Millennials: Three Ways to Prevent a Human Resource Nightmare. (n.d.). Retrieved November 16, 2014, from <http://www.forbes.com/sites/jeannemeister/2012/08/14/job-hopping-is-the-new-normal-for-millennials-three-ways-to-prevent-a-human-resource-nightmare/> (Future Workplace + Bureau of Labour Statistics)

⁹¹ Future of Education. (2014) Association of Professional Futurists. -- An assembly of researchers in the University of Houston Foresight program

Converge: Then use tools to decipher the unique skills and competencies needed and identify the gaps, challenges and their missions. The course will then connect students to experts tackling them.

Tiny Habits: The course also sets up a learning system so that students hold themselves accountable through tiny habits making incremental steps towards their goal. This is derived from Stanford Professor B.J. Fogg's Behavioral Design and Tiny Habits Framework.⁹²

The Seeker Lab:

Self-Discovery Phase (1)

“Replace the fear of unknown with curiosity for it will conquer it more than bravery would”



Components:

Curiosity + Empathy + Perspectives.

Why?

“In order to determine whether we can know anything with certainty, we first have to doubt everything we know.”

– Descartes

We all have our bias. In fact, our world, history, culture and everything we see around us is biased. We only hear one perspective and live our whole lives with

⁹² Fogg, B. (n.d.). PERSUASIVE TECHNOLOGY LAB. Retrieved November 14, 2014, from <http://captology.stanford.edu/projects/behavioraldesign.html>

that bias guiding us. As Raghava KK points out that teaching perspectives is the best way to teach creativity and we need to expose ourselves to as many biases as possible, so that we can create our own bias. And this is a gateway towards co-existence and collaboration among other things. Exposure to differing viewpoints contributes to positive psychosocial outcomes, interpersonal relationships, subjective well-being, cognitive development, and finally good citizenship.⁹³

How?

Some doubt that empathy could be taught; but rather only be transferred. But a method of expanding our empathy is by making the imaginative leap in other people's lives through books, films and experiential adventures; therefore the resources for this course will be in **The Empathy Library**⁹⁴ -- the world's first online empathy collection for catapulting one's imagination into other people's lives. What might it be like to be a child growing up in Tehran, or to be born without sight, or to be a soldier fighting someone else's war? The library offers a unique form of armchair travel that can give you a taste of a different culture, a different generation, a different life. As Ian McEwan put it, 'Imagining what it is

⁹³ Baron, J. (n.d.). Why teach thinking? - An essay. Retrieved November 12, 2014, from <http://www.sas.upenn.edu/~baron/papers.htm/frese.html>

Interesting Things and Curious People: Exploration and Engagement as Transient States and Enduring Strengths. (2009, January 1). Retrieved November 12, 2014, from http://psychfaculty.gmu.edu/kashdan/publications/silvia_kashdan_compass_2009.pdf

- About: How curiosity "works" psychologically and compelling evidence of the link between being curious and improved intellectual and physical outcomes

⁹⁴ Krznaric, R. (n.d.). About the Library. Retrieved November 12, 2014, from <http://empathylibrary.com/about-the-library>

like to be someone other than yourself is at the core of our humanity. It is the essence of compassion, and it is the beginning of morality.'

Practicum:

Build an Empathy museum ⁹⁵ or components of the empathy museum in the community such as projects like:

- Human Library (www.humanlibrary.org) – A global movement staging events where you 'borrow' strangers for conversation.

Design for Emergence & Sustainability *Experience*

Phase (2)

How might we serve the needs of people and organizations better while simultaneously using fewer resources? This course will explore the behaviors and mindset shifts needed to reduce environmental impact, how to conduct a lifecycle and impact analysis, making materials choices and design for things to last extensively.

Collaborative Consumption -- The concept of sharing excess capacity to create tangible social connections across continents and to reduce unnecessary inequalities. It is more affectionately called as 'The Sharing Economy' movement

⁹⁵ Krznic, R. (n.d.). Why every city needs an Empathy Museum. Retrieved November 12, 2014, from <http://www.romankrznic.com/outrospection/2010/11/28/696>

and it is on the rise. It promises over \$1 trillion in business opportunities globally⁹⁶ and is growing from a trend for the young and urban to a viable alternative for everyone. But today's collaborative consumption model is mostly about how the products are shared, not about how they are designed. Therefore, the course will emphasise on how existing business systems can or will be disrupted by new offerings that have less impact and end the cycle of planned obsolescence. Finally, the course will look at reputation as a new currency.

Practicum:

Re-design an experience, business or organization for zero impact/minimal impact.

Build new distribution models that encourage shared ownership, as well as product lines that support multi-user product life cycles

Systems Thinking

Experience Phase (2)

“Formulating the problem by tracing it to its sources is the first step in solving a wicked problem.”

- Rittel and Webber

In a world where we're facing problems of global significance, the key to fixing these problems is by fixing systems. But usually, our approach does a patchwork job of framing solutions rather than getting to the root cause of it. This is what

⁹⁶ Toward the Circular Economy. (2013, January 1). Retrieved November 12, 2014, from <http://www.ellenmacarthurfoundation.org/business/reports/ce2013>

causes systems failures to occur; not framing the problem correctly. Therefore we need to focus on augmenting the entire system rather than combating a particular problem in isolation.

This course will help students solve problems by seeing the whole system, understanding the complex systems in their communities, how that system interacts with them and how they interact with that system. The students will also visualize a system in an advanced state of decay that they are associated with and map a system that they would like to explore for their personal projects. Students and potential viewers alike would gain insights about how the systems were formed, the layers that were built over the years, which of them failed and why. This will also help examine why some elements of systems are still relevant.

Practicum:

Building a Gigamap to describe relationships, find connections, points of interventions and map a complex system, then dismantling the system to optimize and redesign that system for efficiency.

Appreciative Inquiry

Experience Phase (2)

This is a philosophy rather than a technique where the belief is that organizations become possibilities waiting to happen. It is essential to look at the bright spots in some situations rather than analyse the problem. Most often, analysis paralysis hinders us from scaling using what is already working well. In certain situations,

it's more effective to figure out what's working and how more of that can be done than focusing on what's broken and what's needed to fix it. Human beings have a strange relationship with negativity. It tends to stick longer and holds more weight in assessing something. This phenomenon is also called *positive-negative asymmetry*. This happens with our approach with education as well. The emphasis is on the weak spots rather than optimizing the bright ones where the link to the solution is hidden.

These flashes of success can illuminate the road-map for action and spark the hope that change is possible.

Practicum

In this course, students start with what is already working, inquire into what works (Collective Observation), imagine how good it could be (Envisioning), agree how good it should be (Collaborative Dialogue), and commit to what will be (Collective Experimentation). This will be based on David Cooperrider's 5 D Model.

Service Design & Customer Journey. (*EX + Design Phase* 2 + 3)

With a major proportion of the global population working in the service sector (*as high as 80% of all employment⁹⁷*) and with each one of us being regular customers throughout our lives, it is vital to understand the mechanics of this sector and what can be optimized.

This class focuses on designing for user engagement with a particular emphasis on consumer branded experiences. In this class, students will use various points along a user journey (*learn, discover, choose, purchase, unpack, 1st use, 2nd purchase, etc.*) as a source of inspiration to design delightful experiences. We'll take a process-focused look at the delivery of great experiences, especially services. We'll consider techniques for modeling and simulating these systems at the micro and macro level and fix the ruptured systems.

Practicum:

Redesign a Govt. or Public Sector Dept.

Design and simulate a new retail format for the future.

⁹⁷ Field Listing: Labor force - by occupation. (n.d.). Retrieved November 14, 2014, from <https://www.cia.gov/library/publications/the-world-factbook/fields/2048.html>

Pick a point on a consumer journey and design a much more delightful experience.

Reinvent customer interaction and experience with the certain product/service.

Get Sticky (Build Tribes) Continual (1, 2, 3, 4)

“Stories are how we think. They are how we make meaning of life. Call them schemas, scripts, cognitive maps, mental models, metaphors, or narratives. Stories are how we explain how things work, how we make decisions, how we persuade others, how we understand our place in the world, create identities, and define and teach social values.”

- Dr. Pamela Rutledge

Storytelling is a skill that transcends language, culture and geographical boundaries. It is universal and relevant in almost every communication situation. This course will build skills that help tell stories that touch the hearts and minds of people and bring out empathy. It will also help learn how to craft and convey emotional and sticky stories to galvanize positive change (Leadership Presence).

Practicum:

- Students **build a tribe** about a cause they believe in, an idea they want to spread and a hope they want to instil. They will show people why

they need to believe in them, follow their ideas or work enthusiastically with them.

- Stories that shed light on what's wrong with the present situation and establish the case for change by changing the climate of a situation while igniting or diffusing emotions.

Choice Architecture and Behavioral Design. *Design*

Phase (3)

“All our life, so far as it has definite form, is but a mass of habits.” - William James

Habits, scientists say, emerge because the brain is constantly looking for ways to save effort, then we stopped making a choice, and the behavior became automatic. It's a natural consequence of our neurology. And by understanding how it happens, one can rebuild those patterns. As every habit, no matter its complexity, is malleable. All that is required is the right framework and the right intervention. The course will cover areas of Behavioral Economics, Behavioral Design and Choice Architecture as they have applications not only in personal development but also correcting or redesigning societal and global problems such as increasing

organ donations,⁹⁸ improve health outcomes⁹⁹ and encourage savings¹⁰⁰ among countless others.

Organization cultures grow out of the keystone habits in every organization, whether leaders are aware of them or not. *“Self-discipline has a bigger effect on academic performance than does intellectual talent. And the best way to strengthen willpower and give students a leg up, studies indicate, is to make it into a habit,”* argues expert, Charles Duhigg.¹⁰¹

Sources: B.J Fogg, Dan Ariely and Gabe Zichermann.

Practicum:

Build a deliberate change in choice architecture with the goal of engineering a particular outcome.

Ex: Re-designing complex systems or nudging people towards a particular choice, redesigning products and services and its market components like pricing, promotion, differentiation, placement and curated experiences.

⁹⁸ BBC News (31 December 2010), Organ Donation Bid to Target New Drivers, <http://www.bbc.co.uk/news/health-12097225>. Retrieved March 1, 2013

⁹⁹ Johnson, S. (2011, January 24). Harvard grads turn gym business model on its head; fitness plan members pay more if they don't workout. Boston.com.

¹⁰⁰ Lusardi A., Keller P.A., & Keller A. (2009). New Ways to Make People Save: A Social Marketing Approach. NBER Working Paper No.14715. <http://www.nber.org/papers/w14715>. Retrieved January 24, 2013.

¹⁰¹ Duhigg, C. (2012). *The power of habit: Why we do what we do in life and business*. New York: Random House.

Life in Beta (Make-nomics)

(Design Phase

3)

“For the things we have to learn before we can do them, we learn by doing them.”

- Aristotle



Components: Design Thinking + Maker Culture

What?

The Maker movement is growing rapidly across the globe. FabLabs¹⁰² and makerspaces are the natural and informal learning global environments at the intersection of cutting-edge technology, design and peer-to-peer learning and are relatively easy to set up.¹⁰³ The exploratory, DIY approach to problem-solving and innovation makes the Maker movement an incredibly agile and dynamic catalyst for rapid ideation, experimentation and creation. The DIY ethos of making isn't limited to creating physical objects; Makers are starting to reimagine the systems that surround them. And with potential to change work, production, governance, learning and well-being, Maker Culture and Design Thinking could certainly be a vehicle to solve our most pressing problems. And anecdotal evidence is mounting from schools' design labs and makerspaces that students were becoming highly engaged learners.¹⁰⁴

How?

¹⁰² <http://fab.cba.mit.edu/about/fag/> - Details about the global FabLab movement.

¹⁰³ Hatch, M. (2014). *The maker movement manifesto*. McGraw-Hill Education.

¹⁰⁴ Martinez, S., & Stager, G. (2013). *Invent to learn: Making, tinkering, and engineering in the classroom*. Torrance, Calif.: Constructing Modern Knowledge Press

The course will have one theme to inculcate the maker mindset and a mirror course that will cater to the problem the student wants to solve. Here, students will discuss what makes a great prototype, the intricacies of pilots and Vuja De (*Looking at what you have seen before, but differently*).

Practicum:

Prototype products, services, systems, experiences, social experiments, brands and processes.

Painkillers and Vitamins: *Design Phase 3*

Some of the most essential real world skills that most students will benefit greatly from are ignored by higher education institutions. This course will look at addressing them.

Financial Literacy

To be successful at business, you have to understand the underlying financial values of the business."

- Warren Buffet

Most graduates lack basic financial literacy like keeping accounts, developing a budget or make savings for planning and contingencies. Then understanding advanced financial matters like crowdfunding and raising money.

Hustling 101

For effective networking, receiving mentorship to negotiating terms and closings deals, the right technique, the right mindset and the right etiquette is needed.

The Art of the Crit.

Teaching constructive evaluation, understanding and learning from heart-pounding and eye-opening critique and rejection. Students also work beside investors to understand and evaluate companies with them.

Practicum:

Students pitch their idea to a panel of world-renowned entrepreneurs, hackers, designers, artists and experts and strike a potential deal. Either for funding a company, for a job or self-analysis.

'Leagacy' (sic)

Reflection Phase (4)

'Versioning Life'

There is so much insight from reflection that is not tapped enough. Here students continually '*Version*' their development like a mobile application update. Enter everything they've gained and report the bugs they've picked up or fixed. This not only tracks the progress of the learning but also helps decipher what to work on and inculcates gratitude. This Versioning exercise turns into a gratitude journal that researchers believe positively affects health and well-being and success

outcomes. Studies have also shown associations between gratitude and positive outcomes,¹⁰⁵ correlation between gratitude and positive relationship¹⁰⁶.

Action Learning: The ability to acquire competencies through reflection of one's practice

Students will talk about **where they were when they started the Limitless journey, their journey of growth, where they were going next and why!** When sharing these stories and insights from reflections, people gain confidence in their ability to deliver. This reflection is not so much to show their learning process and their insights but to show their progression. It's their experiences, not someone else's best practice.

THE HALO

"Grades are illusions, passions and insights are reality."
- Seth Godin



Inspired by the ideas of Axis Flip,¹⁰⁷ the idea is to show the employer and the world not what courses students have taken

¹⁰⁵ McCullough, M., & Kimeldorf, M. (n.d.). An Adaptation for Altruism? Retrieved November 12, 2014, from http://www.psy.miami.edu/faculty/mmccullough/Papers/Gratitude_CDPS_2008.pdf

¹⁰⁶ McCullough, M., & Emmons, R. (2002, January 1). The Grateful Disposition: A Conceptual and Empirical Topography. Retrieved November 12, 2014, from <http://greatergood.berkeley.edu/pdfs/GratitudePDFs/7McCullough-GratefulDisposition.pdf>

¹⁰⁷ Axis Flip (2014). Retrieved November 13, 2014, from <http://www.stanford2025.com/axis-flip/>

but what they can give to the world. *What if the transcript displayed the skills, ideas and experiences that the students have built rather than the courses?*

This approach generates a broader story of capabilities and potential of a person than transcripts ever did. And these could be rearranged and translated across a myriad of work contexts throughout their lifetimes.

The Halo supersedes the portfolio. It will highlight the student's growth over time and development of key academic and life-skills, networks and experiences over the program, makes them measurable and validates them – substantiating to future investors, employers, clients and other stakeholders what the student can offer the world.

CONCLUSION

The industry-academia paradox is the condition where despite massive youth unemployment globally, employers are unable to find the right talent. Due to the lack of communication between the parties involved, there was an expectation mismatch of skills needed in the job market. The skills most desired include **emotional intelligence, self-discovery and self-awareness, problem solving, leadership, teamwork, and empathy; surpluses of creativity, ingenuity and a mindset towards lifelong learning**, not GPAs and quantitative skills offered by academia.

All this merely highlights the outdated intellectual framework of universities who have struggled to optimize itself for the modern world. With Massively Open Online Courses, escalating costs and cutting-edge new-age universities offering a glimpse of an enhanced avatar of what universities could be, these bring out ingredients needed to build a more sustainable evolution of higher education. To examine the ingredients, one must understand whom this solution could be optimized for. Because, while this crisis is indeed global, it particularly affects India, China, Africa, The Middle East and The United States which constitute 60% of the global population.

Therefore, the solution must be able to reach even **fringe**/marginal communities to truly make an impact. It must also be fused into their anchor behavior and the system it inhibits to **reduce friction**. This way, the solution would complement rather than collide with the existing system. And as each demographic has diverse set of challenges, it must be able to **morph** into the local context.

Next is to replace the unsustainable *Siloed* system that focuses on the highly specialized skills with trans-disciplinary or **orbital thinking** (intersection of disciplines) that foster creativity and innovation as the *siloed* approach is highly unsustainable because the complexity of the wicked problems we're facing are too labyrinthine for one skillset to handle. For this, the curriculum should be **interdisciplinary**, providing a systemic view of complexities and relationship between ideas, competencies and subject matter. In other words, designing for the intersection economy to deal with the transversal and intertwined nature of the problems we have today.

For education to be cutting edge, it must embrace technology and models brought forth by technology. One such, being '**Unbundling**' where the unit of content are courses and not the degree, making courses more become modular, collaborative and iterative. This way, the degree would be a result of multiple combinations of courses from different universities and knowledge institutions customized to the needs and challenges of the community. It will also force professors to improve quality or be replaced. Unbundling could leverage MOOCs to scale and democratize higher education, but in order to ensure deeper learning, a blend of

both on-screen and live learning is needed. This approach is called **Blended Learning**. We're increasingly learning from the internet and other informal sources but it's never tapped into. These display valuable insights and better patterns than transcripts. Therefore, transcripts must therefore evolve to display what the student **can offer the world** through courses, skills, ideas and experiences. This could be vital in the age where the shelf-life of the degree is shrinking, while obsolescence and academic inflation is on the rise.

As industry has pointed out, the focus needs to shift from *Episteme (Know what)* to *Techne (know-how)* and transformation literacy (translating knowledge into action approaches) for the workforce of tomorrow. Instilling the **entrepreneurial mindset** in students is key as it not only nurtures entrepreneurship, but also intrapreneurship and personal development as well. This way, it will enable students to not just acquire knowledge but also create new pathways. It must also instill the **maker mindset** -- a catalyst for rapid ideation, experimentation and creation. This should be supplemented with mentoring to bring in seasoned perspectives and to optimize the students' learning process while also amplifying their potential, competencies and impact.

The inability of the existing curricula and the system to address these needs and the clarity from the ingredients derived from trends and best practices prompted the idea of the Limitless Institute to take off from where the current system left. The Limitless Institute, therefore is a learning ecology that is unfolding human potential towards societal change through immersive, integrative and highly

modular higher education courses designed and built into the existing systems for maximum scalability.

The first piece is to address the needs of the masses by using television as a non-linear evolution of MOOCs and lectures to democratize higher education and turning it into the canvas of the largest classroom in the world. This could be done by leveraging television's massive distribution system and the negligible cost per user in the form of a **Reality Show**. **Limitless Journey** would map the journey of people undergoing intellectual transformation by providing provide resources, community, and education to participants of the show, thereby helping viewers engage better with academia, cultivate their ideas and build a repertoire of skills.

Why a reality show? Because reality shows tap into psychological needs through empathy using a condition called Common Humanity and inspire people through a condition called Upward Social Comparison and enables people to learn subconsciously in the guise of entertainment. This will be supplemented with local meet-ups called **Collisions** to bring a more blended environment and work experientially with the content delivered through the show. The Limitless model then turns into a freemium one to accommodate bigger appetites for learning through its **Accelerants** membership program where members gain access to resources, events, job opportunities and more. The Limitless freemium model tops off with the Human Accelerator, a full suite, all-access version focused on accelerating human potential. It will bring alternative credentials, one-on-one mentorship, and seed-investment to students while feeding into the next iteration

of the show. The Human Accelerator will therefore be a modular, cutting-edge educational program built to be the epitome of everything Limitless stands for. The entire model is to be cyclical and both financially and socially sustainable to reinforce in into anti-fragility.

The Next Steps

Limitless was conceptualized with the intention to be executed immediately. Although the model is very much applicable in other geographies and environments, Limitless will be focused on India because of the massive market opportunity and the severe need neatly coming together as discussed in the Gaps, Needs and Market section earlier in the report. There, it will first approach implementation partners and institutional donors to fund the reality show. Conversations will run in parallel with television producers and television channels.

Next, conversations will need to be had with non-profits, social enterprises, academia, industry, government and others to understand what's needed from an Indian standpoint as multiple realities co-exist in cohesion and they need to be represented. The next round of conversations will have them pledge something to the show, be in mentorship, social media mention, prize donation and other partnership or support opportunities. **Limitless Journey + Collisions** would start first while **Accelerants** would begin based on the reception of the show. The

Human Accelerator is designed to work in harmony with the reality and also work independently and will run after conversations with the ecosystem.

As mentioned before, Limitless is designed to morph itself into various contexts and combinations and permeate into society. Consequently, it could manifest into several offshoots such as the Limitless Journey (Reality Show) and programs taking parts of the curriculum to train convicts. Entering prisons and helping promising convicts lead a new start is vital and companies such as The Last Mile (teaching convicts coding), Home Boy Industries and Defy Ventures are trying to reduce reincarceration and helping them transition into society better. This could even work for war veterans as well. Further primary and secondary research needs to be done in order to responsibly integrate and engage with these stakeholders.

limitlessHope
limitlessDrive
limitlessPotential
limitlessOpportunities
limitlessDreams
limitlessYou

Figure 15: Limitless Concluding Message

Maybe we've just been chasing the wrong metrics all along. Maybe we need to connect dots than collect dots. Maybe we need to measure experiences instead of test-scores. Because it's not just about content mastery anymore, but about putting deep knowledge along with basic skills into practice to address intractable real-world global problems. For those who have the most rigorously tested answers will

*not drive the future of learning; those who pursue the most meaningful questions will.*¹⁰⁸

Limitless Institute emerged from the inability of the existing curricula to better address the needs of its stakeholders, leaving a lot to be desired but never executed. The solution suite is not meant to be a substitute for a university or any pedagogical model as such, but rather support, complement, or enhance the system by taking off from where the current system left.

Limitless would provide the much needed flexibility, autonomy and the motivation to permeate across borders and cultures, yet be malleable to design for and coalesce with the diversities present in each system.

This exploration and the report by itself is a living document, and meant to be iterative. This is merely a reference point.

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