

(Contemplating) The Next Education

Every now and then, there comes an event that breaks the status quo of our lives or at least, affects the surroundings that we live in. Such an event can inherently be good or bad, a fortune or misfortune - that assessment is either objective, speculative, or a subject of perspectives. What matters the most, is the contextual narrative we set around it- the punctuations we put in and whether we choose to call it the start or the end of our story.

My story starts with some mementos... for...

...What's past is Prologue

[Summer of 2011]

“Dad, I want to study abroad at Cornell. It is in the Ivy League, and the best in the world for studying Architecture”

“Why not at a good college in India?”

“...You know, the respected Ratan Tata had studied ‘architecture’ there.”

“He studied Architecture?!?”

“Yeah! The undergrad scholarship is offered in his name, covering Tuition, costs of living, and one round trip to India once every year. I just need to write SATs- but there are no coachings here”

“Umm...hmm...Try it and we’ll talk. But know that we won’t even be able to come to see you there if you get sick. Maybe you can go there for your Masters? We’ll be more prepared... But you are sure about choosing Architecture right?”

“See, I am good at drawing. You have got this project, you would want me to design for it someday! And besides, I’ve heard Mr. Tata in his interview describing how his experience of studying architecture prepared him for a life full of tough decisions and criticisms.”

Cut to...

[6 years later, Summer of 2017]

I had boarded a flight from the UK to India. I was crying my heart out. My father had suddenly died back home in India while I was in Edinburgh for post-grad summer

school. I knew I would have to step aside from architecture and step into my father's shoes... a lot was at stake, continuity was key and survival wasn't going to be easy.

Cut to...

[7 years later, Summer of 2024 -Present]

It's been a year since I successfully wrapped up my "survival phase." Over the years, I've designed and built my house, converted my father's factory space into a student hostel for passive income, and meanwhile, I am setting up my practice which eventually would kickstart my father's project. On the side, I've enrolled myself for an online diploma in Architectural Lighting Design.

For today, there are no pending drawings or site visits, on one tab is my submitted assignment, and on the other is the brief of the Peter Drucker Challenge that I have been contemplating for quite a while now.

Overcoming these flashbacks, I wonder...

...What's Next?

In 2007, the juvenile version of me would have said "Samsung" - not because I knew anything they were up to or had any idea that they were trying to one-up Nokia, but because that's what they advertised- "What's next?- Samsung!". The same is the case with my first idea for the next education... "What's Next?"

"Is it AI?"

This reminds me of the pseudo-psephologists on television and social media, trying to predict the mood and outcome of the ongoing assembly elections in India... through opinion polls, trying to set a narrative, basking in on the chance at a career as political pundits... and of people glued to ascertain the direction in which the nation would go, assessing if the share-market would shoot up or go down.

The thing is... change, although constant, is hard to predict, sometimes unwanted-many times required, but often surprising for the uninitiated. Whereas, for quite a few, it is obvious, apparent, and sometimes, surprisingly slow.

Interestingly, in 2007, Peter F. Drucker, in an interview with Prof. Tom Devenport, said - *"The biggest impact will be on knowledge industries such as education and medicine, which are in great need of increased productivity. The impact on education will be profound, but first, there will have to be a critical mass of technology in the classroom."*

The “sudden” addition of AI tools to the already heavy arsenal of technology has caused a frenzy in both -the enthusiastic and the nettled camps. On the one hand, people are discussing the probable streak of unethical practices, security concerns, unforgiving job cuts, and the inevitable end of many professions. While, on the other, people are busy discussing the potential for innovation and creative applications in IT, education, healthcare, and beyond. But that is not all! A large population is still indifferent and has only little grasp of what the hullabaloo is about. For us, the answer isn't AI, but what we choose to do with it and how.

Taking a system's thinking approach

One way to assess the ongoing change is through the polarized lenses of events and processes. I like to think of events as headlines in a newspaper or a tabloid and processes as the reactionary thinking, debates, conversations, and actions that follow up - be it an individual's mind, at a family dinner table, a corporate meeting, a school competition, a moot court, at a bar, in a factory, on Reddit or in youtube's comments section.

Now, the thing is... events can be organic or externally created and managed but that is hard with processes in real-time. Processes are organic, and only sometimes their outputs are predictable. In systemic terms, events are both - the inputs that are fed to a disciplined set of processes and the output that gets generated. Without these external inputs, the system feeds back its own output and keeps working in a continuum.

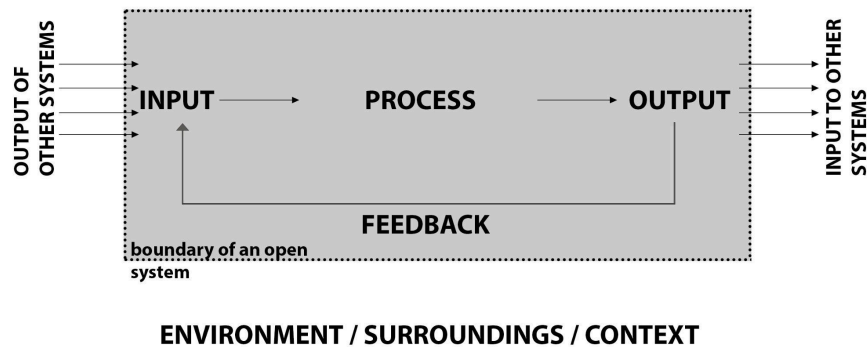


Fig. 1.1 - An Open System

In an open system, processes are open to external influences and feedback from other systems. But the thing is... that each system has some resilience to change. To explain it to myself, I like to imagine these systems as electric discharge lamps with a cathode on one end and an anode on the other. Given the circumstances, there can be three possible stages:

1. At first, when an external voltage is applied to the cathode it is initially met with an internal resistance of the discharge lamp and no light is produced.

2. With enough voltage, this internal resistance is overcome and a current starts to flow between the electrodes- resulting in a gradual increase in light output.
3. Beyond this breakdown voltage, even if there is no increase in voltage, the current uncontrollably keeps on increasing by itself. We call it negative resistance and it is detrimental to the life of the lamp. To prevent the lamp from self-destruction, an external positive resistance is required in the circuit.

So... depending on the circumstances, a system can be in either of the 3 stages. In this analogy, voltage is the external input, the light produced is the system's desired output, and the extra current is the system's own feedback that needs external resistance. For example, let's consider an entrepreneur. For him, the idea for inputs and feedback is to optimize the target system to get the desired output(s). If we consider his innovation or value proposition as the external input, then stage 1 could describe customer apprehension as resistance. Further on, if the entrepreneur does the right marketing and creates a brand statement, he may overcome customer apprehension, and increase his consumer base and revenue. Once there is sufficient customer acceptance, and there are profits, the external positive resistance could be implied as his efforts to sustain, and stay relevant and valuable.

Deriving the Next

The idea of "the next education" originates from the evolving context and the unmet needs of its stakeholders. Primarily, every education system has three stakeholders - the student, the educator, and the society. Suppose we look at the traditional landscape of systems. In that case, it can be inferred that the educational system was envisioned to input disoriented young kids from one end and get well-functioning members of society on the other. And...

...If we consider a learner's journey from Kindergarten to graduation, we realize that s/he is a system in transition. A "System" because it has its own set of cognitive, behavioral, and emotional processes, influenced by unique family-neighborhood environment, resources, and exposure. In "Transition" because it is being subjected to configuration based on a series of stage-specific educational inputs, skill development, and assignment/evaluation-based feedback determined to transition an individual from education to work.

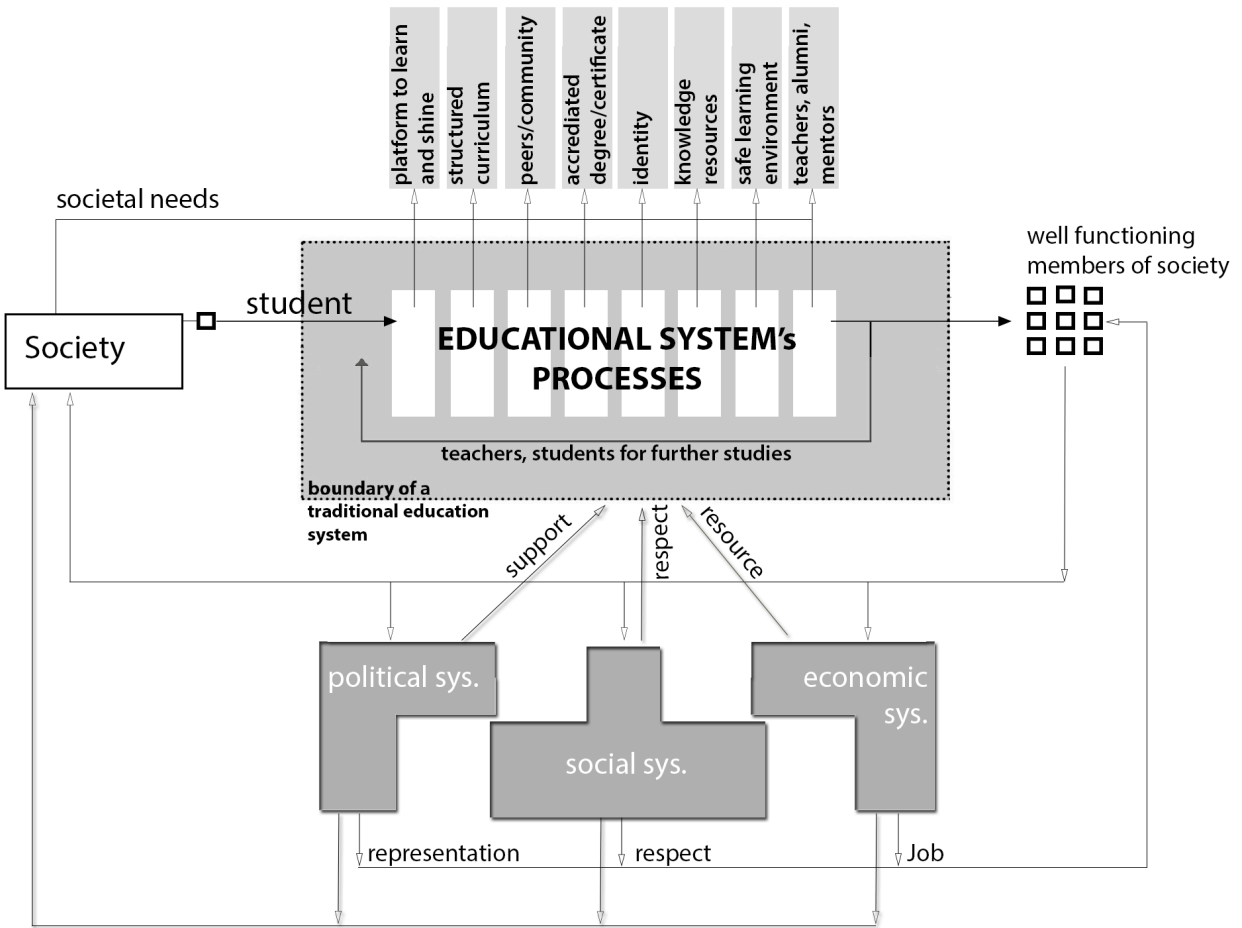


Fig. 1.2 - A traditional landscape of systems (self-conceptualized)

From a society's perspective, the graduate is a well-functioning member of the society who acts as a participant in its socioeconomic and political functions...and in the process, generates various outputs that act as reinforcements to himself, his society, and the educational system.

From an educator's perspective, the same can be seen as a system designed to nurture, mentor, and help them to find and achieve their ambitions... and in that sense, it truly is a noble profession.

“And a learner's perspective...?”

Well, that's the matter at “Trial”.

CASE 101: A STUDENT VS THE STATE OF EDUCATION

Opening Statement

“Students are powerful determiners of the learning that occurs in their classrooms. Understanding why they learn well or poorly is predicated upon clearly understanding their perspectives on learning”

The traditional educational pedagogy, which employed a top-down knowledge-sharing process, failed to realize the cruciality of the difference in the perspectives of an educator and a student. There are many reasons for that. For starters, society was far less individualized and far more hierarchical back when the educational model was designed. Most jobs were not knowledge-based and required workers with only a basic level of standardized education that could have been imparted with approaches like rote learning and memorization. By comparison, that landscape has changed drastically over the years. We are far more individualists than before, with far more opportunities for applications of specialized knowledge on the work front. We have far more resources at our disposal and we are far more educated than before...And we have often felt the need for an improved pedagogy...yet there seems to be little regard for the learner’s perspective.

On the Witness Stand

My Lordships, I would like to call my former self to the Stand...

Question: My Former Self, introduce yourself to the court, please.

Witness: I am my former self from 2013, I am an architecture student in my third year of study in India.

Question: Could you elaborate on the specific problems with the current education methods for the court?

Witness: Certainly. One major issue is that we are not taught how to design. We are made to study different subjects that would help in the process and then we are handed a fantasy brief/context for our design class. The setup has many many missing points... there is no sense of the budget, we have no experience with client meetings, and there is a lack of practical hands-on experience. We(students) are not sure of the design process, we just know that there are various factors at play... at what priority, we don’t know.

Question: How does this affect your learning and career?

Witness: We are getting theoretical knowledge and that too in fragments. We are not being prepared for the realities of the market.

Question: Is there anything else that you find problematic?

Witness: Yes, we are given deadlines for design submissions and mostly, with a lot of deliverables. I feel that the focus should not be on the quantity of work but on the quality. That is what we should be critiqued on...

In Defense

My Lordships, there is no evidence which shows that the current methodology is wrong or that the change in methodology would be better. We have visiting faculties from the profession who give regular critiques, they are on board with the teaching methods and our ask for that many deliverables from the student. Perhaps, the student isn't aware of the realities of transition to the real world. Many starchitects have come out of this pedagogy and they seem to be with us.

...COURT ADJOURNS...

Alright!

“What about the employer's perspective?”

Well... In the general market, there seems to be a gap in the skills in demand by an employer and the ones being brought to the table by a potential employee. Training is often required. Also, on the other side, there's a mismatch in the kind of lifestyle/job an employee wants and the one kind that's being offered.

“And how are you saying this?”

With little experience and from what I hear. I guess... data is hard to come by. But, as an owner of a student hostel, many employers have contacted me to spread their offers among the residents... and as a mentor of sorts, I have had a chat with many graduates... they are all unemployed but still, they just seem to pass on the opportunity and think of doing an MBA.

“But why so?”

Vantage Point

Given how education and technology have grown and penetrated different spheres of our lives, it is imperative to say that the landscape of systems has changed. Suppose, we outline it loosely...

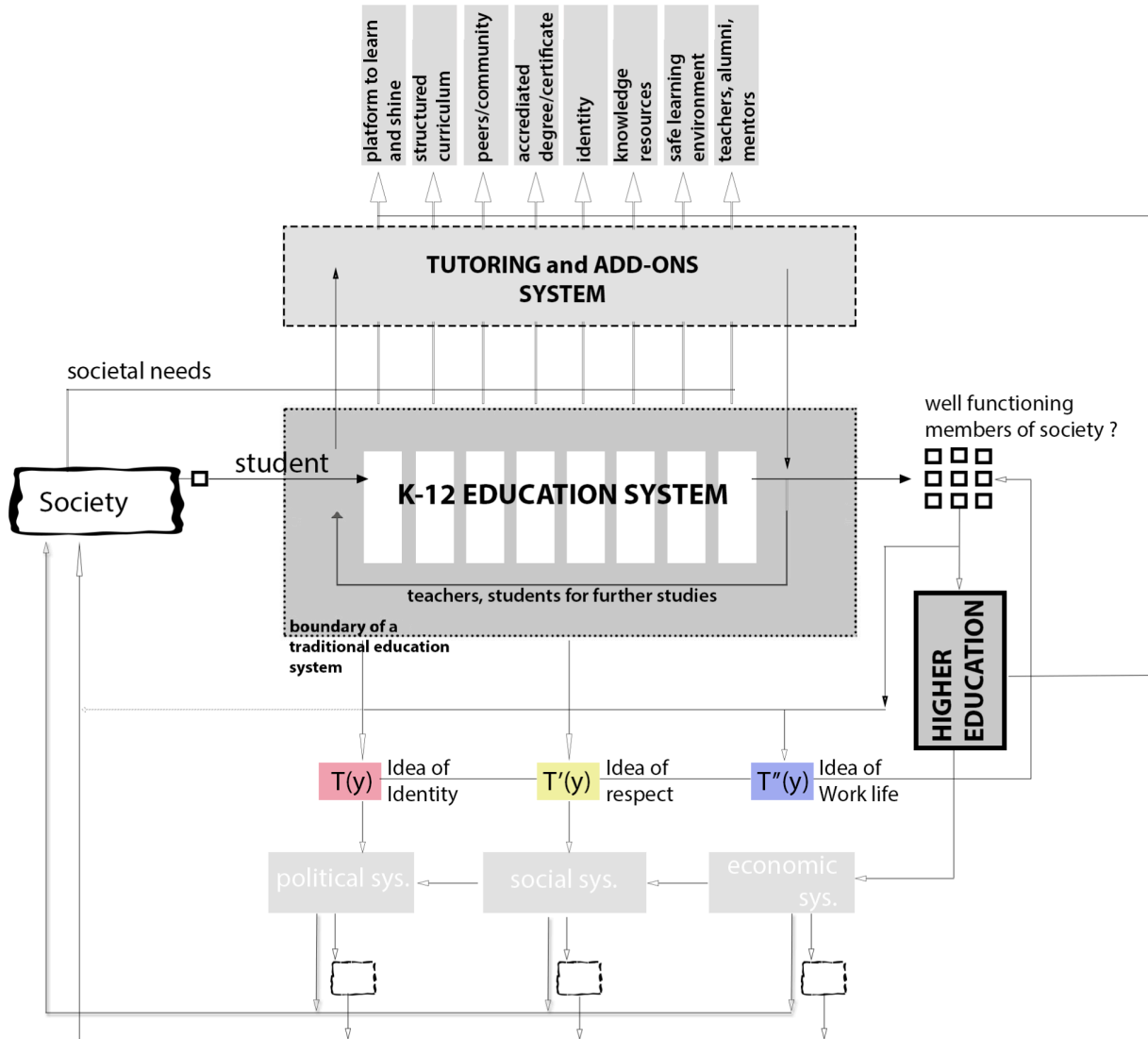


Fig. 1.3 - Evolved Landscape of Systems (self-conceptualized)

Then, we can make the following observations:

- The levels of education have increased, making K-12 education a standardized consumer good that receives negligible external feedback. There is a rise in demand for private tutoring across the world.
- Although structured on the traditional systems, higher education is valuable and comparatively scarce and should be treated as an economic good.

- A high population of educated individuals has helped in societal upliftment. In that sense, higher education increases inequality.
- While a student is a system in transition, his choice to seek higher education makes its nature different. An individual can then be seen as an agent of societal change.
- Technology has 2 aspects. As a hard infrastructure (internet, laptops, smart gadgets), it has upgraded all spheres of our lives and created a space for technology as a soft infrastructure- in the form of apps, data resources, and services that work on data-based algorithmic technology. This soft infrastructure has to capacity to function on 2 levels. For a value producer, it is a tool for managing a system's inputs, and for consumers, it is a consumable good- capable of singularly altering his/her realities.
- With the creation of parallel realities, individuals are ending up in echo chambers, and social islands. Their idea of work-life is altered in a manner that they are increasingly non-congruent to the real-life job offers.
- Further on, Our reality dictates that individuals are more confused than ever - without mentors and with options for various degree/certificate options. And institutions, without congruent feedback, are behaving like money-churning machines, creating consumer goods of limited value.

“Well...then with the presence of cost-effective online learning platforms offering self-directed and self-paced courses, isn't it logical that there are projections of a future with deemed down educational institutions?”

Sure! And with AI products around the corner, it sure appears so. But we must not base our projections on headlines alone. The real value of a product is tested only when it enters the market.

A Case in Point

One fitting example is that of “Byju's”, an Indian Ed-Tech startup, which gained fame for its interactive study materials for K-12 and competitive exams. Starting as a small offline coaching center in 2011, it became a leading online education portal by 2018. It further saw a tremendous growth during the COVID period.

By 2022, Byju's had acquired various significant fishes in the educational markets and expanded by clubbing hardware to its soft services. It reached a valuation of over \$22 billion and attracted major venture capital investments until post-COVID demand for online classes dropped- leading to financial losses, job cuts, and reduced service quality. Additionally, it faced regulatory scrutiny and allegations of unethical behavior, which severely damaged market confidence, resulting in a drastic 99% decline in evaluation by 2023.

Tipping Point

At its best, AI is an upgraded soft infrastructure, capable of evolving and going beyond current smartness levels. It requires a lot of data and a lot of precise hard work, and it can be expensive. For entrepreneurs and their enterprises, the first challenge would be finding the right talent and investing for it. With increasing tools like Chat-GPT on the free market, I believe only educational institutions' framework would suffice. Then, for their product trials, they would need standardized student samples, and that too in batches of different types...Here again, only educational institutes would suffice.

Further on...for society's sake...

From the governmental perspective, it would be a task to educate the upcoming generation against the disadvantages of technological consumption. I believe, that only measures like introducing relevant subject matter into the curriculum of students would suffice.

And if that's the case, I believe, the educational system would terraform in bits and pieces but its ultimate value is going to rise.

Conclusion: Designing the Next

"The best way to predict the future is to create it" - Peter Drucker

If I have learned something from my architecture education, it is that "Form follows function" and if we take cues from the real world, I have seen that completely pre-designed new cities have never worked. Therefore, in the spirit of bringing design changes in the present framework, I propose:

- End of Education is Character: Value-based education in traditional terms for nursery and primary students- with educators taking the help of smart tools only to make learning easier.
- Life is the greatest educator: For Secondary education, educational institutes should undergo curriculum redesign- adopting a mix of both - traditional and

self-directed learning protocols and maintaining their value as the nurturer, and mentor for present-day society. For everything else, there's life.

- For Higher education, the educational framework should go for totally self-directed learning methodologies, with compulsory inputs and investments from potential employers - making higher education more accessible and job placements easier for both.
- Establishment of Training for educationists and a feedback mechanism.
- Points from UN's SDG 4 - Quality Education.