A SHIFT IN AMERICAN EDUCATION

ambriah phillips - senior thesis - class of 2021
“EDUCATION IS THE PASSPORT TO THE FUTURE, FOR TOMORROW BELONGS TO THOSE WHO PREPARE FOR IT TODAY”

- Malcolm X
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INTRODUCTION.

EDUCATION & CLASSROOMS

- basic skills

- Confucius schools: religious practices & philosophical discussion

- basic foundation of commonly held beliefs to prepare students for adulthood

- the goal was to teach children how to be self-sufficient, well-mannered, & informed enough to benefit the community

- need for teaching in large groups rather than within the family unit
PROBLEM.

THESIS STATEMENT

traditional classroom settings and teaching styles fail to promote diverse learning in students that compliment their individual strengths and aspirations

many factors in the classroom environment often go ignored where there are windows for opportunity, thus preventing successful student growth and comfortability

as the world outside of the classroom rapidly changes, current classrooms do not provide students with the fundamental tools they need to not just enter into an unknown future, but play a part in shaping it as well
how classrooms & education have changed over time in the united states

as career-based learning became more popular throughout time, historic forms of classical liberal art education were replaced.

curriculum has a direct influence on the type of classrooms students are taught in... as the need for different skills and occupations change throughout time, so do the classroom environments in which learning takes place.
OPEN EDUCATION CLASSROOMS 1954-1973

1980s
HALT IN CLASSROOM DEVELOPMENT

FOCUS ON EDUCATION/HEALTH & SAFETY 1998-2010s
OPEN EDUCATION CLASSROOMS 1954-1973

1980s HALT IN CLASSROOM DEVELOPMENT

1998-2010s FOCUS ON EDUCATION/HEALTH & SAFETY
OPEN EDUCATION CLASSROOMS
1954-1973

FOCUS ON EDUCATION/HEALTH & SAFETY
1998-2010s

1980s
HALT IN CLASSROOM DEVELOPMENT
students have begun receiving a more autonomous education since the early 2000s. Learning has become more focused on the student rather than the teacher and the world started seeing less fixed desks and more flexible learning spaces.

As the focus and purpose of education in America has shifted, we have yet to see that same shift translated into our learning environments and pedagogy.
ISSUES.

POOR CLASSROOM DESIGN

AMERICAN TEST SCORES

TEACHING FOR THE FUTURE

GENERAL ISSUES
POOR CLASSROOM DESIGN

- lighting
- temperature
- furniture
- desk arrangement
america remains slightly above the OECD average in reading & science, but falls below average mathematics. these scores have been stagnant
in most modern classrooms, children are being taught outdated curriculum that traces back to the early 1900s or before

as technology advances students fail to be able to operate and create the programs of the future. problem-solving, critical thinking, digital skills, & collaboration are scarce

*information provided by the US bureau of labor statistics in 2014*
GENERAL ISSUES

- century old classroom designs
- generalized lesson plans
- lack of student independence
- "golden zone" vs. "shadow zone"
- poor learning environments
- excessive pressure on students to perform
- unengaged & passive learning
CASE STUDIES.

LEADING EDUCATION WORLDWIDE
AN ALTERNATE EDUCATION
AN ALTERNATE CLASSROOM
LEARNING FROM HOME
SPECIALIZED LEARNING
LEADING EDUCATION WORLDWIDE

**CHINA:**
-scored highest of all countries in latest PISA
-rote & submissive learning
-long hours, heavy workload
-achievement oriented

**SINGAPORE:**
routinely ranks in top 3 of OECD testing
-excel in problem-solving skills
-very involved parents
-constantly improving education policies
-“teach less, learn more”

**FINLAND:**
-consistently scores well-above average in OECD testing
-holistic teaching
-intellectual and educational reform
-lack of competition
-no mandated tests, small workload
AN ALTERNATE EDUCATION

CASA SULA - COSTA RICA

their goal as a community-ran school is to “provide ‘unschooling’ methods that give children the best opportunity to reach their full potential”
CASA SULA

WHY IS IT SUCCESSFUL?

**MONTESSORI:**
based on self-directed activity, hands-on learning & collaborative play. in montessori classrooms children make creative choices in their learning, while the classroom and the teacher offer age-appropriate activities to guide the process

**STEINER:**
engaging head, heart, & hands (thinking, feeling, & doing), waldorf teachers work to nurture and engage each child through a curriculum and methodology that integrates academics, arts, and practical skills

**RESULTS:** studies have shown that these methods produce better results in students and benefit their cognitive & social skills
AN ALTERNATE CLASSROOM

UNIVERSITY OF SALFORD STUDY - UK

2015 study that focused on naturalness, stimulation, & individualization in the classroom

as a holistic approach to learning, this study provided students with choices, designated learning zones to appease different stimuli, better air quality, and more dynamic use of space
UNIVERSITY OF SALFORD RESULTS

IN A STUDY OF 153 CLASSROOMS & 3,766 STUDENTS...

**OTHER FINDS:**
- there was a 16% increase in student scores
- individualization contributed to 73% student progress

**CONCLUSION:**
these factors have a real impact on student achievement. if used properly, carefully designed classrooms can produce better academic results in students
LEARNING FROM HOME

there are **2.5 million** homeschooled children in the USA. this number is **growing 2-8% annually** over the past few years.

homeschooled students perform **15-30% better** on standardized tests than public or private school students.

generally score **above average** on ACT and SAT.

finances associated with homeschooling represent **$27 billion** that american taxpayers do not have to spend annually.

* statistics provided by the NHERI (national home education research institute)
WE LEARN
10% OF WHAT WE READ,
20% OF WHAT WE HEAR,
30% OF WHAT WE SEE &
80% OF WHAT WE EXPERIENCE

- american psychiatrist william glasser
SPECIALIZED LEARNING

TRADE SCHOOL:
Type of education designed to provide technical skills required to complete tasks of a particular job.

APPRENTICESHIP:
System for training a new generation of practitioners of a trade or profession with on-the-job training and often some accompanying study.

WHY THEY’RE SUCCESSFUL:
Trade schools continue to grow in popularity as enrollment has nearly doubled since 1999. This kind of hands-on education provides subjects with specialized topics that tailor to their specific needs. They are often cheaper than traditional education like college, but provide equal/greater opportunity upon completion, as well as provide students with the ability to master a skill and obtain recognition in that skill.
the purpose for this survey was to gather information on current K-12 learning environments & how to make them better based off of people’s individual experiences
I SURVEYED...

26 STUDENTS & TEACHERS

77% of the survey participants had public school experiences.
most people value **hands-on learning** and methods that are **visual & stimulating** over traditional learning strategies.
WHEN ASKED HOW MUCH THEY ENJOYED THEIR K-12 EXPERIENCE...

**POSITIVE FEEDBACK:**
those that did thoroughly enjoy school liked it for reasons such as **friends**, **sports & extracurriculars**, and **art**
only 0.01% commented on liking school for comfort or academic reasons

**NEGATIVE FEEDBACK:**
others found school **traumatic, boring, restricting and unengaging** & commented on things like anxiety, bullying, testing, and heavy workloads
on average, people rated their classrooms a 3.5/5 when asked how comfortable they were in class. They reported that neutral temperatures, student independence, & flexible seating would be most beneficial to creating a comfortable learning environment.
“WHAT CAN BE IMPLEMENTED INTO CLASSROOMS TO PUSH INDIVIDUALITY?”

- no cookie-cutter learning
- teachers who care
- more freedom to move around/flexible seating
- abolish grade levels based off age
- student autonomy (give students options where to do their work, working with others will enhance social skills & working alone will increase their independent drive)
- take the focus off testing
- incorporate “work days” into schedule
- smaller classes
- celebrate diversities in the classroom
- emotionally intelligent learning
- make classrooms more comfortable
“WHAT ARE SOME PROGRESSIVE CHANGES THAT CAN BE MADE IN THE SCHOOL SYSTEM TO BETTER-PREPARE CHILDREN?”

1. more relevant curriculum

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2. implement a way for students to get career-based knowledge and experience early on

3. building relationships between students and faculty & giving them a safe space to be themselves
IN CONCLUSION...

my survey and one-on-one interviews concluded that current classrooms are problematic not only in their design but in their operation and pedagogy as well. at the very least even where no major problems occur, there is a high level of discomfort in most american classrooms and not much of a push for diversity or student success. there are many areas of opportunity for solutions to those issues that will benefit students and education systems as a whole
SOLUTION.

classroom design
- design considerations
- revised plans
- furniture specifications
- sketches
- photoshop renderings

comprehensive learning
- introduce LINK program
- branding
- supplemental branding/mockups
- program vision

a new way of teaching
CURRENT CLASSROOMS...
CLASSROOM DESIGN CONSIDERATIONS

- flexible seating
  (soft seating, stools, desk seating, benches, high tables)
- alternative desk designs
  (not fixed, more comfortable, height adjustable, group seating)
- lighting
- air quality
- temperature
- graphic stimulation and color
- acoustic protection and privacy
  (panels/room dividers/cubicles or pods)
- modular furniture
- storage systems
REVISED PLAN #2

lab area

lounge

independent study

storage

lecture

30' - 0''

40' - 0''
REVISED PLAN #3

lecture

independent study

lab area

private study

lounge

lounge

40' - 0"

30' - 0"
LECTURE

- Portable white boards
- Desk
- Grouped desks
- Singular chairs with desk attachment
LOUNGE

- Modular sofas
- Office ballz/floor pillows
- Alternate lighting
- High-back sofa
INDEPENDENT STUDY

chairs with desk attachment

portable white boards & audio panels

stools

pods
OTHER IMPORTANT FEATURES

plants & green walls

class pet

flexible electrical outlets

media surface hubs
BIRD’S-EYE PLAN #1

- Flex lounge seating: soft seating options
- Teacher privacy space: material storage
- Unique desk configuration & flex seating
- Lecture area: not main focus, nothing fixed, everything modular!
BIRD’S-EYE PLAN #2

CENTRALIZED LOUNGE FOR FOCUS, COLLABORATION & COMFORT

SAGE GREEN LIFE WALLS

MULTI-PURPOSE
BIRD’S-EYE PLAN #3

- This 1/2 of plan very open & focus on independent study.
- Lecture more secluded for intimate learning or minimal use.
- Great for tech-heavy classes & both individual & group work.
serving as the main focus of many modern classrooms, the lecture area in these plans are much smaller. Hierarchy has been shifted to create more equal learning spaces within the classroom. Desks in this plan are height adjustable and shaped together to create a plethora of configuration options to fit the needs of the classroom and teacher/students. Seats are also not fixed and flexible seating is offered to allow students autonomy in their seating preferences, even during lecture.
CENTRAL LOUNGE

This view shows an arrangement that utilizes lounging as the central part of the plan. From here, you can see peeks of lab areas and standard desks surrounding the center. This type of arrangement allows for the perimeter of the space to be broken up into more specialized areas and the center serves as a soft space to meet in small groups or work privately. Private study pods and a modular wall “cut” the plan horizontally which allows the plan to be sectioned more easily, almost in half.
PRIVATE STUDY PODS

putting a focus on the pods, this view shows an area that utilizes small, singular rooms meant to be used for independent study. in an active learning classroom like what i have designed, having a space for students to focus in a distraction-less environment is very beneficial to student learning. these pods have less visual stimulation and plenty of acoustic protection.

in this view you can also see a sage green life wall mount and a media table group area. having plants in a workspace has been proven to improve productivity as well as air quality.
COMPREHENSIVE LEARNING

ALTERNATE RESOURCES FOR LIFE AFTER GRADUATION

L.I.N.K. PROGRAM

leverage - involvement - networking - knowledge
giving students the opportunity to experience potential career paths and network through field trips and alternative recruitment

with a similar intent as a job fair, this program would give students early-on experience to not only kick-start their careers but even more importantly give them access to information and resources to figure out what career they may be interested in to begin with

GOAL:

“LINK STRIVES TO DEVELOP PROFESSIONALLY-CAPABLE STUDENTS THROUGH INVOLVED EXPERIENCE AND EARLY NETWORKING”
WHY LINK?
so many students just don't know what to do after graduation and there is so much pressure to make a choice with no experience so they can often feel stuck. most schools push higher education, military enrollment, or select trade occupations, preparing students for what society thinks they should be doing as opposed to what students actually want to do. for students who don't want to follow that structure, it becomes difficult to navigate life after graduation.

HOW WILL IT WORK?
it would be integrated as part of high school curriculum as a professional program that allows students to explore different areas of study (i.e. fine art, business, engineering, health sciences, etc.) through field visits and networking with professionals. this allows for them to explore all of their options before it’s too late. a lot of post-graduation career choices are made out of panic or ignorance of what options are out there so LINK would directly combat that issue.

CONSIDERATIONS:
funding would have to be redistributed or more funding would have to go to education either from the state or through alternative funding/donation. there is also the issue of transportation and chaperones, business availability and willingness to work with schools, and covid-19 safety restrictions.
complete logo:

alternative logo options:

branding details:

urbane rounded - heavy
DISCOVER YOUR PASSION
A NEW WAY OF TEACHING
SUPPLEMENTAL LEARNING FACTORS, CURRICULUM & PEDAGOGY

WHAT EDUCATORS CAN DO:
- acoustic stimulation
- visual stimulation and color
- live plants
- autonomy in learning
- incorporation of other subjects into your curriculum
- class pets

WHAT SCHOOL SYSTEMS CAN DO:
- recesses or breaks throughout the day - even in middle and high school
- meditation
- providing necessary technology/devices for balanced learning
- curriculum expansion

* main takeaway is individualization