



# **Fundamental Learning with MOOCs Targeting 1<sup>st</sup>-7<sup>th</sup> Grade Students**

***Education is not preparation for life.  
Education is life itself - John Dewey***

***Education is the most powerful weapon  
that you can use to change the world – Nelson Mandela***

# What are MOOCs

MOOCs - Massive Open Online Courses

They differ from traditional online classes

- Feature informal video presentations of five to 15 minutes by top professors on various subjects
- Frequent pauses for non-graded quizzes
- Instant feedback on the material just covered

Most MOOCs are FREE

K-12 MOOCs offered by

- Khan Academy (Formed in 2008 by Salman Khan from MIT)
- Class-Central
- Getting Smart
- <http://www.moocs.co/K-12/>

Khan Academy

- Interactive exercises and real-time data on student performance
- Allows students, their teachers and their parents gauge their progress
- Short videos and immediate-feedback quizzes
- Implements a form of mastery learning that is otherwise difficult to manage with a group.
- Grants from Google and the Bill and Melinda Gates Foundation
- 6 million users in 216 countries per month
- 20,000+ close-captioned videos on to its website
- Pilot programs in a number of U.S. schools.

# LFL Sneha Program

## Phase I >> Sneha Care Home (SCH)

- Residential program for HIV-positive children in rural India
- Over 150 children, between the ages of 4 to 13 in the program.
- Most of these children have lost their parent(s), are ostracized by their families and communities
- The focus is on building confidence and self-esteem while inculcating morals and ethics.
- Shining Star School is SCH's academic program.

## Phase II >> Snehagram

- Adolescents infected with HIV
- There over 50 children, between the ages of 13 to 18 in the program.
- Special learning assistance for their secondary and higher secondary level of education under the National Open School ( NIOS) system.
- The part-time teachers / mentors provide guidance and assistance in classroom settings.

# LFL Model @Snehagram

## LFL's Education Model for Rural India

- Harnesses the power of MOOCs (Massive Open Online Courses)
- Government sponsored online K-12 school curriculums
- Local or Online mentors to help children who cannot access good schools or private tutors
- Helps students get a fundamental education and complete their high school graduation requirements.

LFL has been a primary sponsor of Sneha's residential program for over 1000 HIV infected children since 2013.

The Learn for Life Center at Snehagram is powered by solar panels and equipped with refurbished laptops donated by local companies

**Over 250 students** have completed the secondary and senior secondary certifications administered by the Government of India

- Several have enrolled at local universities
- Some have found employment

# Denville School Demographics

<https://www.niche.com/k12/search/best-public-high-schools/t/denville-township-morris-nj/>

Ranking in New Jersey  
#27 Morris County School of Technology  
#74 Morris Hills High School  
#141 Morris Knolls High School

<https://www.schooldiver.com/go/NJ/city/Denville/search.aspx>

Riverview Elementary School  
Denville Township K-8 School District  
Public K-5  
Rank: 79th of 1353

Students: 366

Morris County School of Technology  
Morris County Vocational School District  
Public 9-12  
Rank: 19th of 415

Students: 727

Lakeview Elementary School  
Denville Township K-8 School District  
Public PK, KG-5  
Rank: 149th of 1353

Students: 699

Valleyview Middle School  
Denville Township K-8 School District  
Public 6-8  
Rank: 133rd of 716

Students: 575

Statistics in Denville population  
Morris County >> Table w Columns for Denville, MorrisCounty  
School Rankings

Socio Economic Demographics  
Racial demographics

Standardized Test Scores

No Mentors

MOOCs have the potential to enable high schools to offer electives that their budgets otherwise don't permit, They can "expand access to opportunity, expand access to higher-level courses ... which typically would be under-enrolled and canceled at the high school level. There is essentially no incremental cost."

"They definitely have a role to play and they do it well in rural schools and with courses students wouldn't otherwise have access to," he says. "It serves a valuable purpose" if used to supplement, not supplant, classroom education. is really just to fill in the holes where there aren't necessarily experienced teachers in an area,"

Khan Academy, for example, says that its courses free up teachers to interact directly with students. One method of doing so is in a "flipped classroom" where teachers assign a video for homework, then work on related problems in class the next day. Ideally, the academy says, students watch videos and work on exercises at their own pace.

K-12 MOOCs will ideally be used in face-to-face or blended instruction.

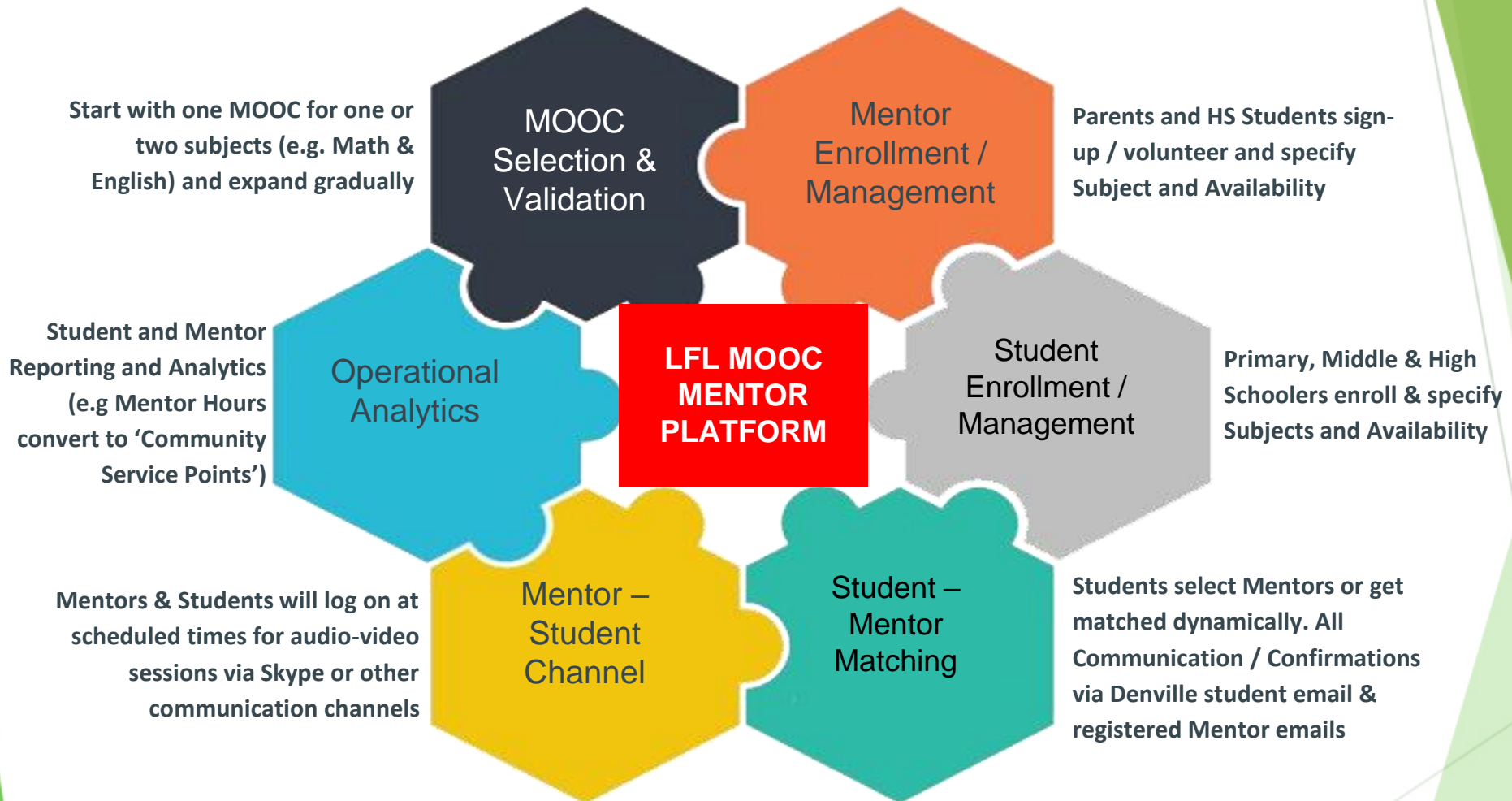
# Education's Challenge is fundamental - Teaching students to think for themselves

*DISRUPTIVE INNOVATION through AI, Blockchain, Genomics, Robotics, Energy Storage is changing the way we live*

*BUT Education Models have barely changed in over 100 years*

- *Not all students are at the “same level”*
- *Not all students learning at the “same speed”*
- *BUT Teacher can only teach at one speed in a traditional classroom*
- *Students getting a C Grade pass on to next level without fully understanding the material from the previous level*
- *The growing importance of STEM subjects in our lives*
- *The growing job opportunities*
- *Lack of mentors at home who understand the new subjects*

# LFL Model : Mentoring w MOOCs



**The LFL Platform will be integrated seamlessly into the Denville Student Portal  
All Platform Management costs will be funded by LFL Grants**

# Next Steps

- *Follow up Discussion to determine approach that best fits our community of teachers, parents and students*
- *Trial “Soft Launch” with a small group of Friends and Family to test all the modules for several weeks*
- *Observations & Recommendations for changes*
- *Integration with Denville Student Portal*
- *Live Trial during Summer of 2019*
- *Full launch for 2019-20 Academic Year*



# References

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