# PRACTICAL OPEN SOURCE **E**DUCATION TOOLKIT FOR INCI USIVE CIASSROOMS

SFIN-6009 Business and Design Thinking

> SFIN-6010 The Human Factor

> > Fall 2021

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# EMPATHIZE

DEFINE

IDEATE

PROTOTYPE

CHANGE

### **STRUGGLE**

### **EMPOWER**

### **ASPIRE**

### **GROW**



Refugee children in Canada, face various challenges which are intertwined & diverse in nature. As much as the situation is challenging for refugee students, it is also challenging for teachers whose responsibility is to ensure equitable learning for all students.



Canada renewed its commitments to ensure that the educational needs of children and youth are prioritized as part of Canada's response to the Syria crisis through its significant support of more than \$160 million to the No Lost Generation initiative.



Refugees who arrived in Canada as children have a higher completion rate of high school, college, university and graduate degrees compared to children born in Canada.



Refugees report a higher sense of belonging to Canada than People born in Canada. Their strong sense of belonging to Canada demonstrates their commitment to integrate into Canadian society and to call this country home.

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(Ladson-Billings, 2015)

(UNICEF, 2020)

**77** 

(UNHCR, 2017)



(UNHCR, 2017)

### RESEARCH QUESTION

How might Canadian elementary schools create inclusive and equitable environments for recent refugee and existing students?

### **HOMOGENEOUS**



There was an occasion before where we had crazy hair day and there was a refugee student who had their hair done in like little poofs and one of the teachers were saying, oh, I can see how crazy your whole is for crazy hair day. And that was just the student's regular hair and so although it was not intentional it affected the student negatively.

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ESL & Special Education Teacher Ontario

### **RIGID**



Lots of research exists and schools know what need to be implemented, but there is a lack of resources which does not allow for implementation.

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Inclusive Education Consultant & Teacher
Alberta

### **IMPRACTICAL**



You spend a lot of time doing things that don't actually end up being used. Such as designing a curriculum or plan a lesson. But they don't actually spend that much time planning a lesson in real life. But in training, it's binders and binders of paper records of this. But you don't use any of this.

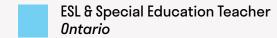
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Developmental Psychologist & Teacher

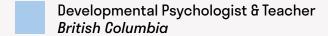
British Columbia

### RESEARCH SYNTHESIS

#### **SEMI STRUCTURED INTERVIEW - RESPONDENTS**







#### **PRIORITIZED LITERATURE REVIEWS**

- Foresight for Every Kid

  Amy Satterthwaite (2015)
- Syrian Refugee Children's Perspectives on School Integration Yan Guo, Srabani Maitra, Shibao Guo (2019)
- The Impact of Trauma and Refugees: Resources for Educators

  Deanna Taylor (2017)
- The Dilemma of Inclusive Education:
  Äli Leijen , Francesco Arcidiacono and Aleksandar Baucal (2021)
- Resource Guide for Supporting Children with Refugee Experience Peta Schur (2014)

#### **CULTURALLY RESPONSIVE PEDAGOGY**



#### PARADIGM SHIFT FOR TEACHERS -> EVOLVED EDUCATOR MINDSET



#### LACK OF PRACTICAL PATHWAYS FOR TEACHERS



#### **UNDERSTANDING & NAVIGATING TRAUMA**



#### UNDERSTANDING INCLUSION



#### FLEXIBILE MEDIUMS FOR EXPRESSION & LEARNING



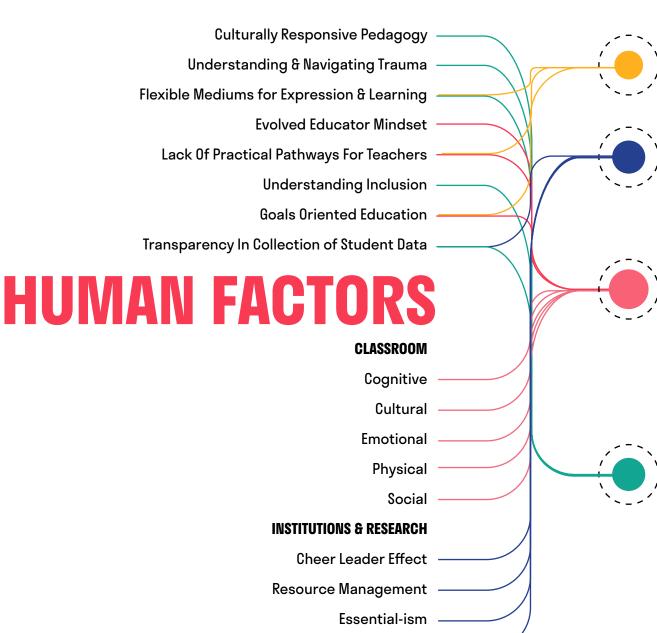
#### GOAL ORIENTED EDUCATION



#### TRANSPARENCY IN COLLECTION OF STUDENT DATA



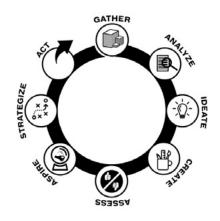
## RESEARCH CONCLUSION



**Confirmation Bias** 

# PRACTICAL OPEN SOURCE **EDUCATION** TOOLKIT FOR INCLUSIVE **CLASSROOMS**

## **EXISTING FRAMEWORKS**



### **The Futurized Teaching Process Framework** (Satterthwaite, 2015)

- Better integrate low-socioeconomic status students
- Interdisciplinary approach to teaching and learning
- Involves the engagement of foresight practices
- Builds long-term time perspective



### **Holistic Framework for Building Inclusive Schools** (Guo-Brennan, 2019)

- To provide meaningful educational experiences to refugee students
- Epistemically sound and ethical strategies
- Teacher's leadership and engagement
- Open and Inclusive processes

#### Inferences

- Frameworks are theoretical in nature
- Overarching theme, lacking specifics
- Upper management and district level execution
- Execution needs involvement of external agencies

## **CRITERIA FOR FINAL SOLUTION**

- 1. Should be longitudinal in nature, that is be valid for all refugee students alike.
- 2. Should be geography-agnostic, that is, the solution can be adopted all across Canada.
- 3. Should be holistic in nature. Should take into consideration all factors and needs related to refugee students.
- 4. Should be easy to comprehend and executable for teachers in every school, regardless of school district.

## **NEEDS INFORMED THROUGH RESEARCH**

#### **ACADEMIC**

- Goals oriented learning
- Language learning
- Individual flexible learning styles
- Technology readiness

#### SOCIAL

- Sense of belonging
- Sense of self and individuality
- Adaptability
- Language proficiency
- Team spirit

#### **EMOTIONAL**

- Safe space to express and emote
- Normalizing vulnerability
- Building resilience
- Dealing with trauma
- Connectedness and intimacy

#### **CULTURAL**

- Cultural acceptance
- Culturally responsive education and schools
- Diverse classroom environments
- Celebration of diverse festivals and holidays

#### COGNITIVE

- Engaging homework (right-brained)
- Patience and sensitive discipline standards
- Multi-sensory learning
- Independent learning and understanding feedback

### **HUMAN FACTORS**

#### **INDIVIDUAL**

- Strong sense of individual identity
- Pride in one's cultural identity
- State of objective observation
- Resilience
- Healthy emotional expression

### SOCIO-ECONOMIC

- Future-time perspective mindset
- Classroom activities devoid of any financial requirement
- Equitable environment (Children burdened by poverty are more likely than their wealthier peers to suffer from limited mental functions affecting language acquisition, executive functioning, memory, and attention skills)

#### **INTERPERSONAL**

- Creating culturally responsive classroom decorations
- Enabling environment for safe expression of vulnerability amongst peers
- Being able to easily express concerns and opinions
- Nurturing empathy and compassion
- Language learning

#### **EDUCATOR'S MINDSET**

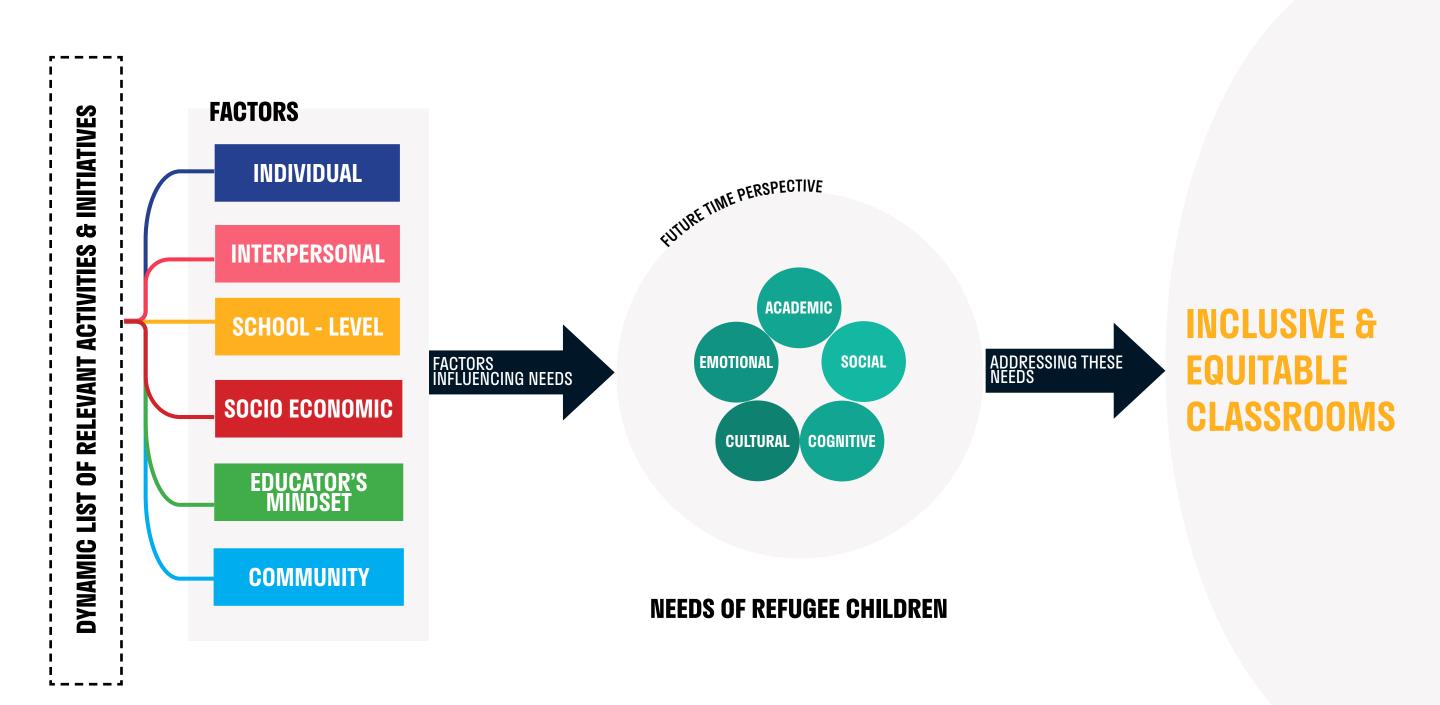
- Working knowledge of diverse cultures, backgrounds and associated sensitivities
- Teacher training programs to evolve mindsets
- Prejudiced views due to middle-class background
- Nuanced learning techniques for every student
- Collaborative learning
- Patience, empathy, compassion, and inclusion
- Access to valuable resources
- Flexible pedagogy

#### **SCHOOL - LEVEL**

- Sharing of background information of students with teachers and faculty
- Signs and documents in relevant languages
- Balanced population of refugees, Canadians, immigrants, and indigenous group
- Open and inclusive environment
- Involving parents and guardians to improve pedagogy

#### COMMUNITY

- Understanding of different religions
- Celebrating festivities across religions (inter-religion and inter-community engagement)
- Religious holidays for diverse religions



## **SAMPLE ACTIVITIES**

#### **PHYSICAL**

YOGA AND MEDITATION
—

**ARTFUL PLAY** 

#### **EMOTIONAL**

PRE-SEMESTER ORIENTATIONS
—

PERSONAL RELATIONSHIPS

#### COGNITIVE

SELF OBSERVATIONAL ANALYSIS

**ROLE PLAYING GAMES** 

#### SOCIAL

STORYTELLING SESSIONS

**ARTFUL PLAY** 

#### CULTURAL

CLASSROOM DECORATION/ TEAM DESIGNING

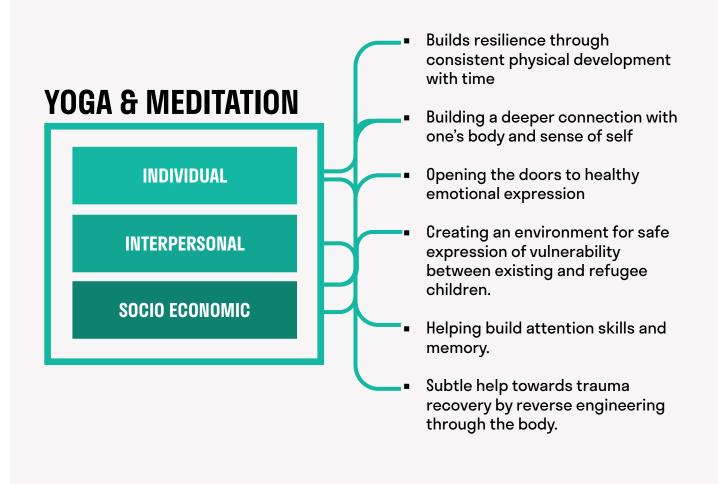
CELEBRATION OF DIVERSE FESTIVALS

INCLUSIVE CURRICULUM DESIGN

TRAINING TEACHERS DIVERSE TEACHING METHODS

## **YOGA & MEDITATION**

ACTIVITY	Yoga and Meditation		
DESCRIPTION	Mind affects body and body affects mind. For those who's minds are traumatized, in high defense or sensitive, relaying back from body movements and other sensory channels can open the gateway to mental destressing. In turn helps with relaxation, attention, memory, identity, connectedness, sleep, emotion and senses.		
DURATION	30 mins		
MATERIALS REQUIRED	Yoga mats, yoga blocks, exercise balls		
GROUPS / INDIVIDUAL	4-5 per group/Individual		
VIDEO DEMONSTRATION	https://www.youtube.com/watch?v=X655B4ISakg https://www.youtube.com/watch?v=CBko9JPMtHs		
EXPECTED LEARNING	Self-regulation, body control, stability, alignment, spatial orientation, alertness, relaxation, body relaxation, emotional sensitivity.		
MOTIVATIONS	Winners of games may be incentivized by not having homework for that day, or choosing to lead the class for the next game.		
REWARDS	Children are allowed to dance to music of their choice for 15 mins, or perform singing and screaming activities for fun.		
FOLLOW UP ACTIVITIES	Relaxing breathing activities, auditory activities and laying on the floor with eyes closed.		
COMMENTS			

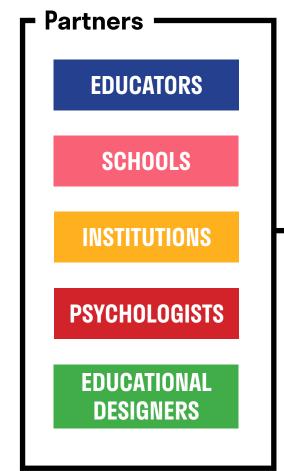


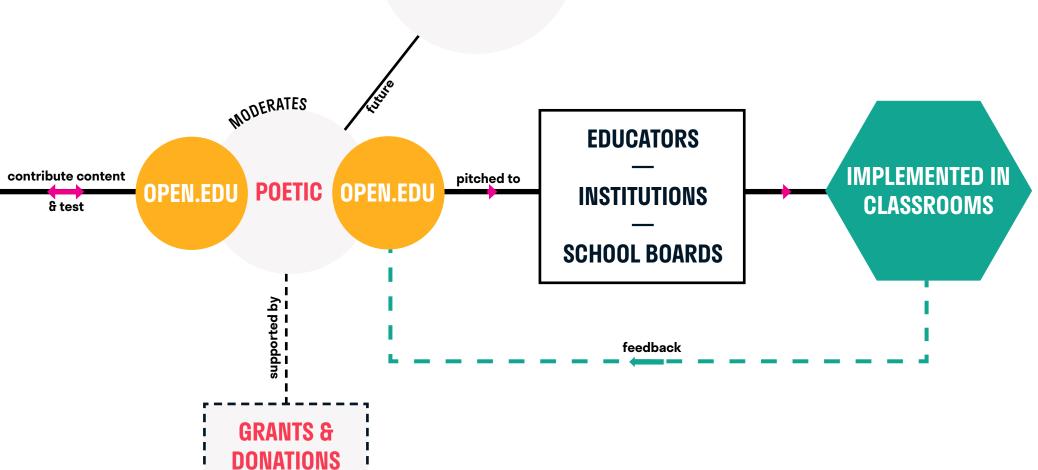
## YOGA & MEDITATION

ACTIVITIES	DESCRIPTION	STEPS	OUTCOME
Freeze Dance Yoga Style	It's the game where children get to let loose, shake, twist, turn, and dance to their favorite tunes.	Simply play a favorite song and have the children dance around. When the music stops, shout out the name of a yoga pose and the students will then have to freeze in that pose. This also tests their knowledge of poses. Be mindful that if you do a pose that is one-sided, you must have them repeat the pose on the other side. It's fun to see which moves faster, their minds or their bodies, as they think and try to jump into the pose.	The great part about freeze dance yoga-style is that it supports self-regulation and the ability to regulate and control their bodies. And obviously, it's also fun!
Yoga Race	This is one race that doesn't involve running instead, the students will walk.	The teacher will start by standing at one end of the room and the students will stand on the opposite end. When the teacher turns their back, the students have to walk toward the teacher. When the teacher turns around, the teacher will shout out a pose and the students will have to stop where they are and quickly get into that pose. The person that reaches the teacher first, gets to lead the game.	This game supports children in their self-control. It teaches them to be able to resist the urge to run and to be able to stop at a moment's notice. It relies on the visual cue of the teacher in turning around and it teaches the kids to follow the instructions they're told.
Silly Train	This one strikes the perfect balance of letting the kids be their fun, silly selves while still teaching them how to follow instructions.	Have all of the students line up behind the teacher in one straight line. Make sure that there is about an inch or two of space between the students. The teacher, or whoever is leading the train, will pick a pose that everyone will eventually do. When the leader is ready to start, they will lead the train around the room. Passengers or people following will dance or move as silly as they can, while staying in line or staying on the train. However, once the leader turns around, everyone must instantly go into the previously mentioned pose. You can take turns by changing train leaders once they do one lap around the room. <i>Tip: Have some music playing in the background for added fun</i> .	This game supports children with their spatial orientation and helps their sense of direction and organization.
Auxiliary games in additions to creating a more relaxing environment.	Children are asked to lay down on the floor with their eyes closed.	Putting on some relaxing music, sounds of nature, rain, birds, ocean waves etc. Ask children to identify the faint sounds they hear throughout the piece.	

## **DEVELOPMENT PLAN**

REVENUE GENERATING PRODUCTS & SERVICES





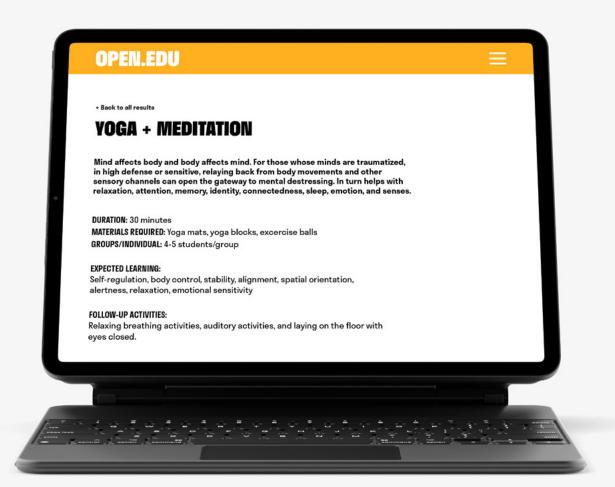
### **OPEN.EDU**

#### **DESCRIPTION**

- Centralized website with access to the toolkit
- Options to learn and explore individual themes within the toolkit
- Free downloads of relevant printables
- Options to suggest activities & to provide feedback

#### **VALUE PROPOSITION**

- Open access
- Practical activities and guides
- Feedback learning



## **UNBOX.EDU**



- Curated activity box for students delivered monthly
- Activities and play tools designed on themes of culture, diversity, and learning

## AID.EDU



 Everyday planner and teaching aids for teachers and school faculty to implement toolkit

## **CULTURE.EDU**



 In-person workshops, cultural days, and diversity training events for schools

### **BUSINESS MODEL CANVAS**

#### **KEY PARTNERS**



- Schools
- School boards
- Teachers and faculty
- Provincial government
- **Education designers**
- Universities
- Policy makers
- Community members
- Developmental psychologists

#### **KEY ACTIVITIES**



- Pitching the toolkit and framework to education boards, teachers, other faculty
- Distribution and testing across multiple school boards to gauge true value
- Building an accessible and user-friendly website

#### **RESOURCES**



- Core team of individuals from diverse backgrounds to moderate, curate and create content and activities for the toolkit
- Business development team to pitch the toolkit to necessary stakeholders - teachers, schools, education boards. home teachers.

#### **VALUE PROPOSITIONS**



- An open, accessible, collaborative, user-friendly toolkit to help create better integrated and inclusive classrooms
- Easy to understand implement activity guides for teachers
- The activities built on the toolkit will help foster inclusivity and create equitable classrooms.

#### CUSTOMER RELATIONSHIPS •

Users of this toolkit will have

education designer on our team.

direct contact with an

product offerings.

There will be potential for

teachers to help better the

Collaborative open source

One-on-one sessions with

the toolkit/framework

teachers to take them through



#### Schools



- School boards
- Teachers and educators

**CUSTOMER SEGMENTS** 

- Provincial school boards
- Home school teachers

#### **CHANNELS**



- Online and social media
- Partnerships with universities

medium



- School-to-school pitching

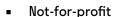
#### **COST STRUCTURE**

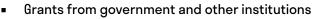


- Business development team
- Website development and maintenance



#### **REVENUE STREAMS**





Potential premium services and products

Partnerships with teachers and universities



### **FINANCES**

### **REVENUE**



- Grants from government or other institutions
- Subscription model for premium services and products (UNBOX.EDU, AID. EDU, CULTURE.EDU)

### **EXPENSES**



- Initial website design and development
- Ongoing website maintenance
- Ideation and testing of new materials
- Creative team to build materials, collateral, and marketing tools

### **CRITERIA FOR SUCCESS**

- Creates a more inclusive and equitable classroom
- Flexible enough to work in all classrooms across Canada
- Not a burden for teachers and school faculty to implement
- Easy to update with new tools based on ever-changing refugee integration climate
- Financially sustainable

# THANK YOU!

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## **SPEAKING NOTES**

Good afternoon everyone. We're finally here, discussing the culmination of all our efforts over the last few weeks. And we're proud to present our solution - POETIC. It stands for Practical, Open-source, Education, Toolkit for, Inclusive, Classrooms.

We know this is a business and design thinking class. Therefore, we want to describe our solution through the design thinking lens. We empathized, we defined our problem through research, we ideated on the solution, we created a prototype and finally we wish to bring about a change in the status-quo through our solution.

Let me give you some quick background -

We began by first understanding the problem we had in hand and then we empathized with the situation. We recognized that Refugee Children are the most vulnerable group of refugees. Moreover, they have the most potential to create better futures for themselves, their families, and the nation they seek refuge in. Finally, we strongly believed that education can empower refugee children. So, that is how we arrived at refugee and education.

We moved to defining our problem. Our preliminary research, had us faintly understand that there is exists a problem in the integration of these refugee children in classrooms and schools. That's when we defined our research question. (Read the question) But this needed backing, so we dived head-on deep into research. We conducted thorough literature reviews, going through research papers from recognized researchers and organizations. We also wanted to conduct interviews with teachers and educators who actually deal with refugee children. We were lucky enough to speak with a few of them.

As you can see on this slide, these are some excerpts from our interviews with these teachers, that current integration techniques and frameworks in Canadian schools are homogenous, rigid, and really impractical to execute.

#### Research Synthesis:

We had so much data on hand. And we synthesized it using thematic analysis. What came out of this synthesis was extremely valuable and helped us define our solution. We identified pressing themes.

Theres a need for culturally responsive pedagogy. The need for teacher preparation programs to understand diverse cultural backgrounds, trauma, and language. Their need to understand what inclusion means in its bare bones sense. We also identified Human Factors that were influencing the needs of refugee children in a classroom setting. Cognitive needs, cultural needs all of which we'll explain in the slides to come.

We also recognized influences of human factors on Teachers themselves when we interviewed them:

- -Cheer leader effect where teachers only spoke about positives
- -Essentialism basically the stereotyping of students from a certain region and religions
- -Inability to manage the resources they have at their disposal

#### Moving on to ideation:

We tried to understand some of the existing integration frameworks that other researchers had put together to aid inclusivity and equity in classrooms. We came across really insightful frameworks

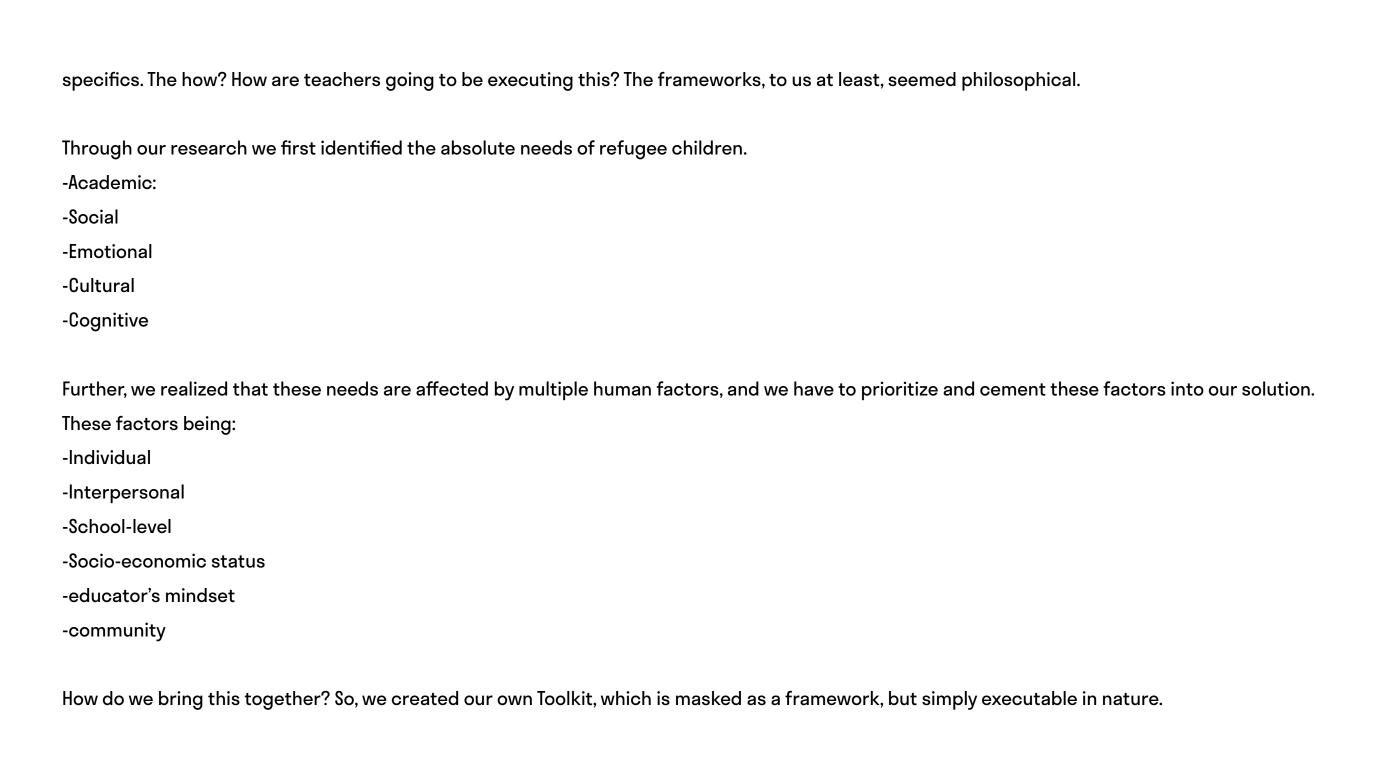
#### **Futurized Teaching framework:**

- -This process/framework is intended to form inquiry and production in a classroom, so as to repeatedly activate and engage past, present, and future oriented thinking.
- -lt forces students to look at the future thereby maximizing resilience in the face of change, and perhaps instilling hope.

The Holistic framework for building inclusive schools:

-This model is based on the need for educators and administrators to receive information and training on epistemically sound and ethical strategies to provide meaningful educational experiences to refugee students.

Although these frameworks are theoretically sound, but they are just theoretical in nature. It's a brilliant overarching theme but it misses out on the



Who executes this framework? Teachers

Why? To create inclusive and equitable environments in classrooms such that refugee students better integrate in the classroom.

And most importantly, HOW? Most frameworks that we came across does not describe how. And that is the Value we are proposing through our solution.

This is our solution.

I'm going to explain how this works. All teachers need to think about is how they're going to satisfy the mentioned needs of refugee children. Satisfying these needs will lead to inclusive and equitable classrooms.

Now the teachers also have a clear view of the factors that affect a refugee child's needs. So, all she has to do is identify the affected factors. And our solution will point towards an activity that the teacher can conduct in class to overcome that factor. The USP of our solution is this Dynamic list of relevant classroom activities and initiatives.

Sumona will take you through a sample activity.

And discuss how we're going to package this solution - the website