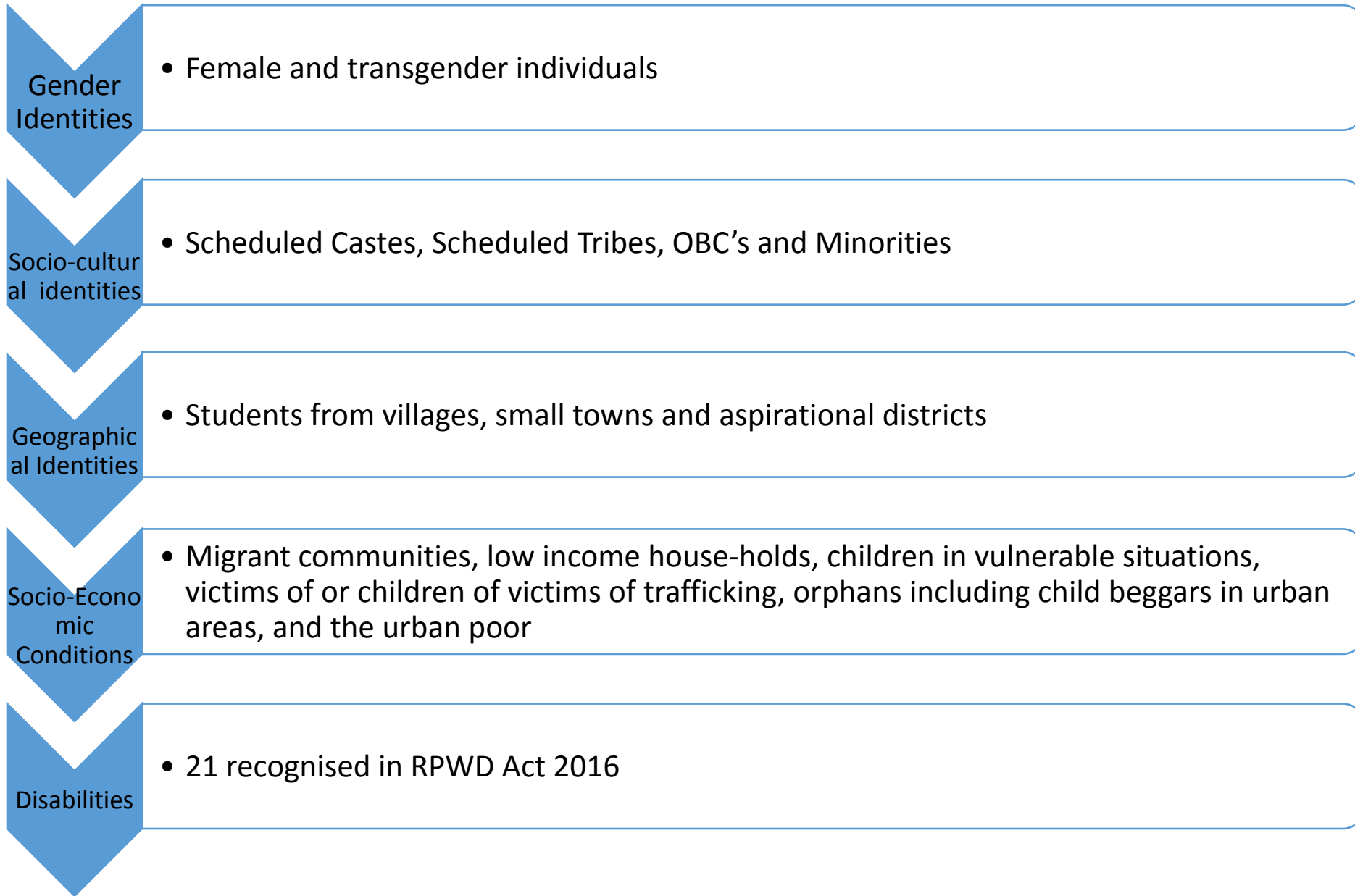


Digital Technology for Children with Special Needs

डॉ भारती कौशिक

एसोसिएट प्रोफेसर, सी आई आई ई टी , ऐन सी ई आर टी

SEDG's recognized in NEP2020

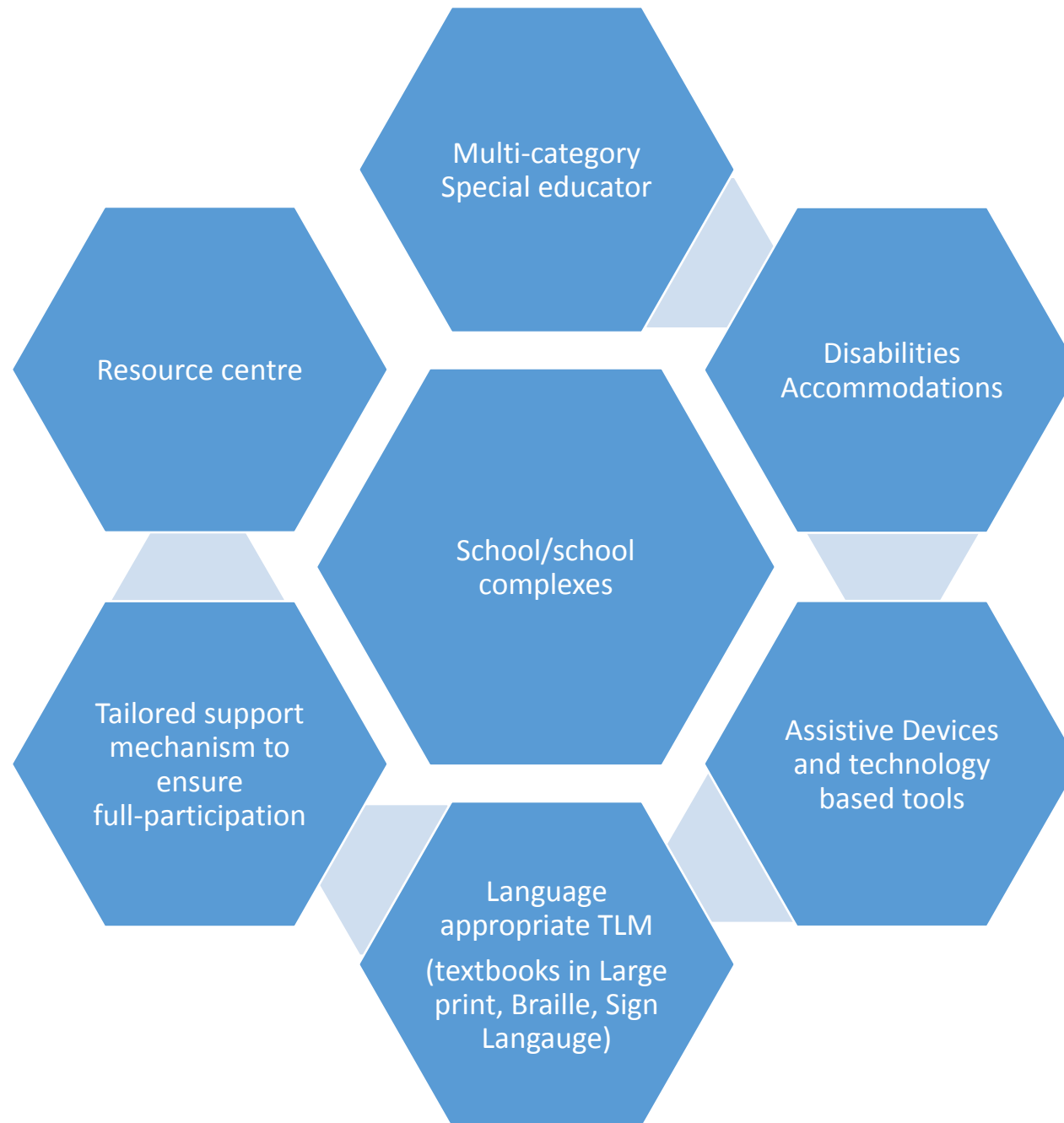


Provisions for Children with Disabilities

- Enable full **participate in nearby school**--Foundational Stage onwards
- Follow **RPWD Act 2016** definition of inclusive education 'system of education wherein students with and without disabilities learn together and the system of teaching and learning is suitably adapted to meet the learning needs of students with disabilities'.
- Schools/school complexes **resources** ---special educators with cross-disability training, **resource centres**
- Barrier free access, with safety & security in all schools and for all **school activities including arts, sports, and vocational education**
- **Assistive devices, appropriate technology-based tools, language-appropriate teaching-learning materials** (e.g., textbooks in accessible formats such as large print and Braille, ISL) ---NEP, Pg-5,9

Policy is in complete consonance with the RPWD Act 2016 and endorses all its provisions for school education

Inclusion Fund





Measures for SEDG's

Organizing
cycling and
walking groups

One on one
teachers and
tutors, peer
tutoring

Providing
bicycles

Technological
Interventions

Appropriate
barrier free
infrastructure

Open
Schooling

Measures SC's and ST's

Special hostels
in dedicated
regions

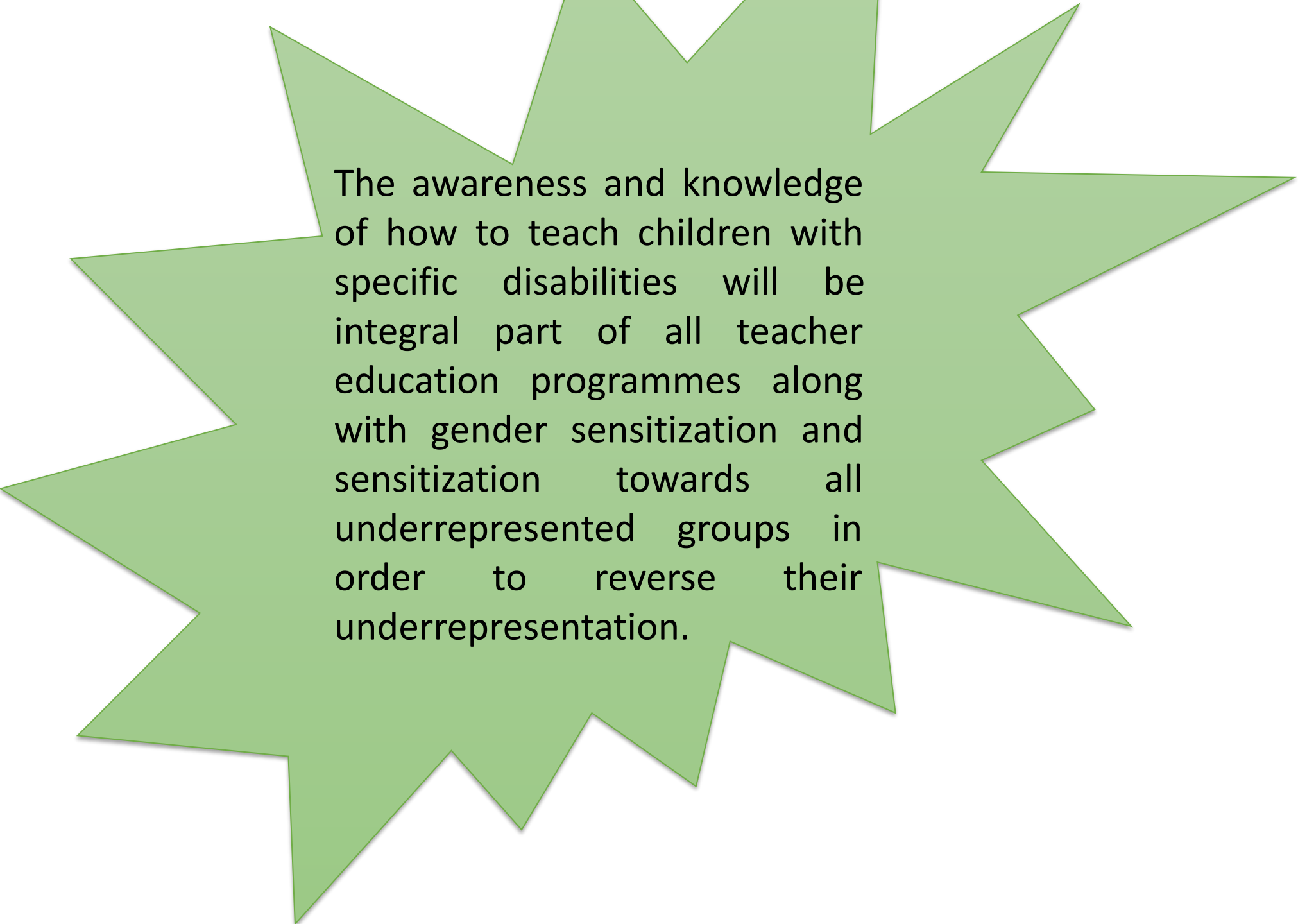
Financial
Assistance
(fee wavers &
scholarships)

Bridge
Courses

Single
Window
Coordination
of provisions

NCC wings

Equity based
school culture

A green, multi-pointed starburst shape with a white outline, centered on a white background. The starburst has approximately 12 points of varying lengths and angles. Inside the starburst, there is a block of black text.

The awareness and knowledge of how to teach children with specific disabilities will be integral part of all teacher education programmes along with gender sensitization and sensitization towards all underrepresented groups in order to reverse their underrepresentation.

Essentials

- know your learner
- know your pedagogy
- know your content



UNCRPD Principles

- Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons;
- Non-discrimination;
- Full and effective participation and inclusion in society;
- Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity;
- Equality of opportunity;
- Accessibility;
- Equality between men and women
- Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities



"Our challenge is not to educate the children we used to have or want to have, but to educate the children who come to the schoolhouse door."

H. G. Wells

Sustainable Development Goal -4 & NEP 2020 (p.3-5)

- SDG – 4 : “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” by 2030. *(NEP, Pg-3)*
- Equitable access to the highest-quality education for all learners regardless of social or economic background by 2040. *(NEP, Pg-3)*
- Education is a great leveler and is the best tool for achieving economic and social mobility, inclusion, and equality. *(NEP, Pg-4)*
- Providing quality education and targeted opportunities in order to enter and excel in the educational system, to all students including historically marginalized, disadvantaged, and underrepresented groups.
- The aim is producing engaged, productive, and contributing citizens for building an equitable, inclusive, and plural society as envisaged by our Constitution. *(NEP, Pg-3,5)*
- Respect for diversity and local context in all curriculum, pedagogy, and policy.
- Full equity and inclusion as the cornerstone of all educational decisions. *(NEP, Pg-4)*

Equitable and Inclusive ECCE (NEP, 2020, p. 7)

- Quality ECCE is not available to crores of young children, particularly children from socio-economically disadvantaged backgrounds. *(NEP, Pg-7)*
- Strong investment in ECCE has the potential to give all young children such access, enabling them to participate and flourish in the educational system throughout their lives.
- Universal provisioning of quality early childhood development, care, and education must be achieved, by 2030, to ensure that all students entering Grade 1 are school ready.
- Ensure universal access to high-quality ECCE across the country in a phased manner. *(NEP, Pg-10)*
- Special attention and priority will be given to districts and locations that are particularly socio-economically disadvantaged. *(NEP, Pg-8)*

Equitable and Inclusive ECCE (NEP, 2020, *p.* 7-8)

Teachers

- Teacher vacancies will be filled at the earliest, in a time-bound manner - especially in disadvantaged areas and areas with large pupil-to-teacher ratios or high rates of illiteracy.
- Special Attention will be given to employing local teachers or those with familiarity with local languages.
- A pupil-teacher ratio (PTR) of under 30:1 will be ensured ;
- Areas having large numbers of socio-economically disadvantaged students will aim for a PTR of under 25:1.
- Teachers will be trained, encouraged, and supported - with continuous professional development - to impart foundational literacy and numeracy.

NEP, 2020, *pg. 10 Universal Access and Participation*

- Ensure **universal access and opportunity to all** children of the country to obtain quality holistic education—including **vocational education - from pre-school to Grade. 12, till the age of 18 years** *(NEP, Pg-10)*
- Achieve **universal participation** in school by carefully tracking students, as well as their learning levels, in order to ensure that they
 - (a) are enrolled in and attending school, and
 - (b) have suitable opportunities to catch up and re-enter school in case they have fallen behind or dropped out.
- Provision of Counsellors or well-trained social workers connected to schools/school complexes

Bridging the Digital Divide , NEP pg 58, 59

- Digital divide to be eliminated through Digital India campaign and ensuring the availability of affordable computing devices.
- Use of technology for online and digital education adequately addresses concerns of **equity**
- Digital infrastructure: Invest in creation of open, interoperable, evolvable, public digital infrastructure in the education sector that can be used by multiple platforms and point solutions, to solve for India's scale, diversity, complexity and device penetration
- Online teaching platform and tools: Appropriate existing e-learning platforms such as SWAYAM, DIKSHA, will be extended to provide teachers with a structured, user-friendly, rich set of **assistive tools** for monitoring progress of learners

Bridging the Digital Divide

(NEP, Pg-59) :

- through mass media, such as television, radio, and community radio will be extensively used for telecast and broadcasts.
- educational programmes made available 24/7 in different languages .
- A special focus on content in all Indian languages will be emphasized and required;
- Digital content will need to reach the teachers and students in local medium of instruction

Virtual Labs *(NEP, Pg-59) :*

- Existing e-learning platforms such as DIKSHA, SWAYAM and SWAYAMPURABHA will also be leveraged for creating virtual labs so that all students have equal access to quality practical and hands-on experiment-based learning experiences.
- The possibility of providing adequate access to SEDG students and teachers through suitable digital devices, such as tablets with pre-loaded content, will be considered and developed.

Use of Technology in Teaching-Learning

- **Technology-based solutions** will be used for the orientation of parents/caregivers (*NEP, 2020, pg.27*).
- Wide-scale dissemination of **learning materials** to enable parents/caregivers to actively support their children's learning needs (*NEP, 2020, pg.27*).
- A rich variety of educational software will be available in all major Indian languages and will be accessible to a wide range of users including students in remote areas and Divyang students (*NEP, 2020, pg.57*).
- Teaching-learning e-content will continue to be developed by all States in all regional languages, as well as by the NCERT, CIET, CBSE, NIOS, and other bodies/institutions, and will be uploaded onto the DIKSHA platform (*NEP, 2020, pg.57*).

Addressing Diversity

- Vibrant ecosystem has to be encouraged to create solutions to solve India's challenges of scale, diversity, equity (*NEP, 2020, pg.60*).
- Reach out the 6% of GDP considered extremely critical for achieving the high-quality and equitable public education system that is truly needed for India's future economic, social, cultural, intellectual, and technological progress and growth. (*NEP, 2020, pg.61*).

My Role

Towards a New Beginning