#### Principles & Implementation of

# National Education Policy (NEP 2020) Faculty Development Programme

Capacity Development of Faculty Members

for

**Assessment & Accreditation of University** 



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# Why National Education Policy Besides NAAC 7 Criterias ?

- Preparedness of University for National Education Policy 2020. (Need to Include)
- Write a Report in 500 words and submit along with SSR (As a part of SSR of NAAC).
- As per 6 Indicators Suggested by NAAC. (pp 46-48)
  - NEP 2020 is Integration of NAAC 7 Criteria.
- Peer Team Visit (PTV) Verifies the implementation of NEP 2020 during their visit (3 Days).
- Therefore We Must Implement NEP 2020.

### **National Education Policy 2020**

(Source: Original PDF of NEP 2020)

- This Policy Propose the Revision and Revamping of All Aspects of Education Structure including regulation & governance.
- To Create a New System that is Aligned with the Aspirational Goals of 21st Century Education, SDGs, while building upon India's traditions and value system.
- Particular Emphasis on the **Development** of the **Creative Potential** of Each Individual.
- Develop cognitive capacities, such as critical thinking and problem solving also social, ethical & emotional capacities.

## National Education Policy 2020 Research & Innovation

# Aims at

Fostering Innovation & Creativity.....

The Fundamental Principle of the NEP 2020 is

to Identify and Foster the Unique Capabilities

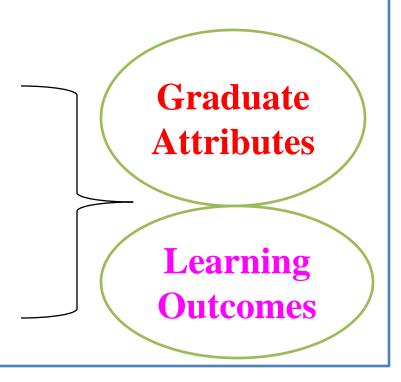
of Each Student by Promoting Creativity and Critical

Thinking to Encourage Logical Decision Making and

Innovation."

# **Fundamental Principles of NEP 2020**

- 1. NEP 2020 is **Outcome** of **Extensive Research** on Present Education System under the Chairmanship of Dr. **Kasturirangan**, **ISRO**.
- 2. Policy would like to **Develop Scientific Temperament.**
- 3. Equal Emphasis on
  - Creativity
  - Critical thinking
  - Logical decision making
  - Innovation



# **Fundamental Principles of NEP 2020**

- 4. Outstanding Research as a Co-Requiste for Outstanding Education & Development (OR = OE).
- 5. Continuous Review On Sustained Research.
- 6. Multidisciplinary & Holistic Education-
  - Research & innovation thrives under such conditions/ environment.
  - Provide such Conducive Environment for Conducting Research & Innovation.
- 7. NEP 2020 Envisions Innovation & Out of Box Ideas Through Research.
- 8. Above points clearly indicate that NEP 2020 is Based on Strong Foundation of Research & innovation starting from early school education to university.
- 9. What is Vision of NEP 2020? NEP 2020 envisions:
  Transforming India into Knowledge Society through
  Creation of Knowledge through Research & Innovation
  along with High Qualify Education.

# **Fundamental Principles of NEP 2020**

10. Providing India as one of the Largest Knowledge Economy in the world &

Global Knowledge Super Power in 21st Century.

- 11. Education & Research cannot be Separated from each other.
- 12. Aims to eliminate shortage of manpower in Research & Innovation in All Fields Such As

Academic, Technology, Engineering, Medical, Agriculture, Industry, Arts, Social Sciences, Literature.

- 13. Research & Innovation Starts from Schools, Colleges & Universities.
- 14. Increased Emphasis on Mathematics & Computational Thinking through the school years through variety of Innovation Methods.

# PART – II : Higher Education (PP. 33 – 49) Quality Universities New & Forward Looking Vision

- Universities must form the basis for Knowledge Creation & Innovation, there by Contributing to Growing National Economy.
- The Purpose of Quality Higher Education is not just for Employment.
- It represent more vibrant, Socially engaged, cooperative communities, cultured,
   Productive, Innovative, Progressive & Prosperous nation.
- NEP 2020 envisions complete overhaul & re-engineering of the higher education System to overcome these challenges & thereby deliver high-quality education with equity and inclusion.

#### **NEP 2020 : Include Following Changes**

- 1. Large multidisciplinary universities.
- 2. Moving towards more Multidisciplinary Undergraduate Education.
- 3. Moving towards faculty university autonomy.
- 4. Revamping Curriculum, Pedagogy, Assessment, student support, enhanced student experiences.
- 5. Reaffirming the integrity of faculty & institutional leadership Positions through Merit Appointments.
- 6. Career Progression based on teaching, research and services.
- 7. Establishment of NRF to fund outstanding peer reviewed research
  - Actively seed research in universities.
- 8. Academic & Administrative Autonomy.
- 9. Single Regulator for Higher Education.

## **Structure of Degree Programmes**

#### 1. Undergraduate degree will be either.

- 3 or 4 years duration.
- Multiple Exit Options within this period.
- With appropriate certifications.

#### For Example-

• Certificate : After Completion of 1 year in a discipline

or field including vocational/professional

Diploma : After 2 years of study.

Bachelor's Degree : After 3 years.

#### 2. 4 Year Multidisciplinary Bachelor's Research Degree

- Chosen Major (by Choices)
- Chose Minor (by Choices)

- With Research.
- Rigorous Research Project in their Major Areas of study.

# **Structure of Degree Programmes**

- 3. Students who complete 4 Year Bachelors. Research Degree Programme: 1 year Masters Programme by Research.
- 4. 4 Year Research Degree Programme Directly join for Ph.D.
- 5. 3 Year Undergraduate Programme. (No Research)
  - Can do 2 Years Master Degree Program.
  - 2<sup>nd</sup> Year Entirely for Research.
- 6. Integrated 5-Year Bachelor's/ Master's Program.
- 8. Ph.D. Shall require either Master's Degree or 4 Years Bachelor's Degree for Research.
- 8. M.Phil Degree is discontinued.

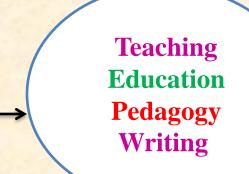
# **Structure of Degree Programmes**

#### Ph.D. Programme

- Ph.D. Programme is Restructured.
- Required Credit besed courses in
- Exposure To
  - Pedagogical Practices
  - Designing Curriculum
  - Credible Evaluation Systems
  - Communication etc.
- Teaching Assistantship is Mandatory for every JRF Ph.D. Student (3 Lecturer/day)

#### Multidisciplinary Education & Research Universities (MERU)

- Would be set up.
- Aim to Attain Highest Global Standards in quality education, research & Innovation.
- Set up highest standards of multidisciplinary education across India.



# **University Means**

A Multidisciplinary institution of higher learning that offers Undergraduate and Graduate Programmer with High Quality Teaching & Research and Community Engagements.

#### **Types of Universities**

- 1. Research Intensive Universities. equal emphasis on teaching and research.
- 2. Teaching Intensive Universities:
  Greater Emphasis on Teaching but
  Still Conduct Significant Research.
- 3. Autonomous Degree Granting Colleges.

Large multidisciplinary institution of higher learning that **grants undergraduate degrees.** 

- Primarily focused on undergraduate teaching.
- Generally Smaller than university.
- Autonomous degree granting colleges could be evolved into Research intensive or teaching intensive Universities.

#### **Types of Universities**

- Freedom to move gradually from one category to another based on planer & actions & effectiveness.
- Accreditation system will develop and use appropriately different & relevant norms.
- Besides teaching, research contribute to the faculty development.
- Growth in both public and private Universities.
- Option to run ODL or Online programmes.

If accredited (A+/or/A++)

- Blended Mode of Learning Preferred.
- Provide opportunities for life long learning (SDGs).
- Gradually phasing out the system of affiliated colleges
   by 2030 through graded autonomy.

#### **National Research Foundation (NRF)**

- To truly grow and catalyze quality research in India, the NEP 2020 envision the establishment of NRF. Outstanding research at all academic institutions Particularly universities & Colleges. (Where research is currently in a nascent stage)
- The Indian Govt. has approved the bill on creation/ establishment of NRF in India on 28/06/2023.
- NRF is allocated an initial budget of Rs. 50,000 crore for 2023 to 2027 28.
- NRF is aims to promote, fund & advanced scientific research in universities.
- Goal is to bridge the gap between research & universities, colleges, institutions and R & D laboratories.
- Focus on need based research.

#### **Focus on Research & Innovation**

- Setting up "Start up incubation centers".
- Technology development centers.
- Centers in Frontier Areas of Research
- Creates industry Academia linkages.
- Interdisciplinary Research including humanities & social sciences Research
- Research in areas of infectious diseases
- Epidemiology
- Virology
- Diagnostics
- Instrumentation
- Vaccinology
- Promoting Research among student communities.
- Hand Holding of Students for Research.
- Establish Research Laboratories.

# **Optimum Learning Environment**

## & Support of Students

- Requires Comprehensive approach that involves;
  - Appropriate Curriculum.
  - Engaging Pedagogy.
  - Continuous formative Assessment.
  - Adequate Student Support.
  - Interesting Curriculum.
  - Relevant Curriculum.
  - Curriculum updated regularly.
  - Align with the latest knowledge.
  - Meet Specific learning outcomes.
  - High Quality Pedagogy is Necessary to successfully
  - import the curriculum material to the Students.
  - It directly influence learning outcomes.

#### **Optimum Learning Environment & Support of Students**

- Assessment methods must be scientific.
  - Designed to continuously improve Learning.
  - Test the application of the Knowledge.
- Development of Capacities that promote.
  - Student Wellness.
  - Good Health.
  - Psycho Social well being
  - Strong ethical grounding is most critical for high quality learning.

# Optimum Learning Environment & Support of Students

- Curriculum
- Pedagogy
- Continuous Assessment Student support.
- Suitable Resources
- Infrastructure
- Quality Libraries
- Class Rooms
- Laboratories
- Sports
- Recreation Areas
- Dinning Areas
- Student Discussion Spaces

Cornerstones of Quality education & Learning

Learning
Environments are
Engaging and
Supportive
Succeeds Students

#### **Holistic & Multidisciplinary Education**

- Concept of University was born in India 5000 year back.
- Takshashila was 1<sup>st</sup> University in world.
- Banabhatta's (Kadambari) described good education as knowledge of 64 Kalaas or Arts.
- 64 Kalaas consisted of singing, painting, dance, sculpture,
   Mathematics, Physics, Chemistry, Medicine, Engineering,
   Carpentry, cloth making soft skills, such as discussion, debate
   and communication. Liberal arts.
- Liberal arts to be stared in higher education.

#### **Holistic & Multidisciplinary Education**

- Integration of humanities and arts with science, technology and engineering and mathematics (STEM) shows positive learning outcomes including following.
  - Increased capacity
  - Innovation
  - Critical thinking
  - Higher order thinking capacity
  - Problem solving abilities
  - Team work
  - Communication skills.
  - In depth learning
  - Mastery of curiosity across fields.
  - Increase in social and moral awareness.
  - Research and innovation improves.
  - through holistic multidisciplinary education approach.

# **Holistic & Multidisciplinary Education**

- This will develop well rounded individuals and moral in an integrated manner.
- Holistic education approach of all undergraduate programmes including professional, technical and vocational disciplines.
- IITs have arts and social sciences since 1960.
- Arts & social sciences will learn more science and also include Vocational and Soft Skills.

(Description in Maximum 500 Words)
NAAC Revised Manual: 21/12/2022

#### 1. Multidisciplinary / Interdisciplinary :

- Delineate the Vision/ Plan of institution to transform itself into a Holistic Multidisciplinary Institution.
- Delineate the Institutional Approach towards the Integration of Humanities and Science with STEM and Provide the Detail of Programs with Combinations.
- Does the Institution offer Flexible and Innovative Curricula that includes Credit-based Courses and Projects in the areas of Community Engagement and Service, environmental education, and Value-based Towards the Attainment of Holistic and Multidisciplinary Education. Explain.
- What in the Institutional Plan for offering a Multidisciplinary Flexible Curriculum that enables Multiple Entry and Exits at the end of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> years of undergraduate education while maintaining the Rigor of Learning? Explain with examples.

- What are the **Institutional Plans to Engage in more Multidisciplinary Research** Endeavors to find solutions to society's most pressing issues and challenges?
- Describe any Good Practice/s of the Institution to Promote
   Multidisciplinary/Interdisciplinary Approach in view of NEP 2020.

#### 2. Academic Bank of Credits (ABC):

- Describe the initiatives taken by the institution to fulfill the **Requirement of Academic Bank of Credits** as proposed in NEP 2020.
- Whether the institution has **Registered under the ABC** to permit to learners to avail the benefit of **Multiple Entries** and **Exit** during the chosen programme? **Provide details**.
- Describe the efforts of the institution for Seamless Collaboration,
   Internationalization of Education, Joint Degrees between Indian and Foreign Institutions, and to Enable Credit Transfer.
- How Faculties are Encouraged to Design their Own Curricular and Pedagogical Approaches within the approved framework, including Textbook, Reading Material Selection, Assignments, and Assessments etc.
- Describe any **Good Practice/S** of the institution **Pertaining to the Implementation** of Academic bank of credits **(ABC)** in the institution in view of NEP 2020.

#### 3. Skill Development:

- Describe the **Efforts** made by **Institution to Strengthen** the **Vocational Education** and **Soft Skills** of students in alignment with **National Skills Qualifications Framework.**
- Provide the details of the programmes offered to **Promote Vocational Education** and Its **Integration** into **Mainstream Education**.
- How the Institution is Providing Value-based Education to Inculcate Positivity amongst the learner that include the Development of Humanistic, Ethical, Constitutional, and Universal Human Values of Truth (Satya), Righteous Conduct (Dharma), Peace (Shanti), Love (Prem), Nonviolence (Ahinsa), Scientific Temper, Citizenship Values, and also Life Skills etc.

#### • Enlist the Institution's Efforts to:

- Design a Credit Structure to ensure that All Students Take at least one Vocational Course before graduating.
- Engaging the Services of Industry Veterans and Master craft persons to provide vocational skills and overcome gaps vis-à-vis **Trained Faculty Provisions**.
- To Offer Vocational Education in ODL/Blended/ On-campus Modular Modes To Learners.

- NSDC Association to Facilitate all this by Creating a Unified Platform to Manage Learner Enrolment (Students and Workers), Skill Mapping, and Certification.
- Skilling Courses are Planned to be offered to students through Online and/ or Distance Mode.
- Describe any Good Practice/s of the Institution Pertaining to the Skill
   Development in view of NEP 2020.
- 4. Appropriate Integration of Indian Knowledge System (Teaching In Indian Language, Culture, Using Online Course)
  - Delineate the Strategy and Details Regarding the Integration of The Indian Knowledge System (Teaching in Indian Language, Culture etc) into the Curriculum Using both Offline and Online Course.
  - What are the **Institutions Plans** to **Train** its **Faculties** to Provide The Classroom Delivery in Bilingual Ode (English and vernacular)? Provide the Details.
  - Provide The Details of the Degree Courses Taught in Indian Languages and Bilingually in the Institution.

- Describe the **Efforts** of the Institution to **Preserve** and **Promote** the following:
  - Indian Languages (Sanskrit, Pali, Prakrit and Classical, Tribal And Endangered etc.)
  - Indian Ancient Traditional Knowledge.
  - Indian Arts.
  - Indian Culture and Traditions.
- Describe any Good Practice/s of the Institution Pertaining to The Appropriate Integration of Indian Knowledge System (Teaching in Indian Language, Culture, Using Online Course) in view of NEP 2020.

#### 5. Focus on Outcome Based Education (OBE):

- Describe the **Institutional Initiatives** to transform its **Curriculum** towards **Outcome Based Education** (OBE) ?
- Explain the efforts made by the institution to capture the **Outcome Based Education** in **Teaching** and **Learning Practices**.
- Describe any Good Practice/s of the institution pertaining to the Outcome Based Education (OBE) in view of NEP 2020.

#### 6. Distance Education / Online Education:

- Delineate the Possibilities of Offering Vocational Courses through
   ODL Mode in the Institution.
- Describe about the Development and use of Technological Tools for Teaching Learning Activities. Provide the details about the Institutional Efforts towards the blended learning.
- Describe any Good Practice/s of the Institution pertaining to the
   Distance Education/ Online Education in view of NEP 2020.

#### 6. Distance Education / Online Education:

- Delineate the Possibilities of Offering Vocational Courses through
   ODL Mode in the Institution.
- Describe about the Development and use of Technological Tools for Teaching Learning Activities. Provide the details about the Institutional Efforts towards the blended learning.
- Describe any Good Practice/s of the Institution pertaining to the
   Distance Education/ Online Education in view of NEP 2020.

#### **2(b)**: Institutional Initiatives for Electoral Literacy

(Description in maximum 500 words)

- 1. Whether **Electoral Literacy Club** (**ELC**) has been set up in the University ?
- 2. Whether **students' co-ordinator** and **co-ordinating Faculty** members are appointed by the University and **whether the ELCs** are functional? Whether the ELCs are representative in Character?
- 3. What innovative programmes and initiatives undertaken by the ELC?

  These may include voluntary contribution by the students in electoral processes participation in voter registration of students and communities where they come from , assisting district election administration in conduct of poll, voter awareness campaign, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.

### **Increased Access, Equity & Inclusion**

#### Scholarships for disadvantaged & underprivileged students

- Online Education
- ODL
- Infrastructure & learning materials accessible & available to learners with disabilities.
- Institutional Restructuring & consolidation.
- Transforming higher education institutes into large multidisciplinary

universities, knowledge hubs

**Highest Recommendation of NEP 2020** 

- Build vibrant communities of scholars of Peers.
- Break down harmful silos.
- Increase human material resources.
- Ancient Indian Universities, Nalanda Vallabhi, Vikramshila were multidisciplinary vibrant Universities & demonstrated great success of multidisciplinary research & teaching.
- Create a well rounded and innovative students and individuals.

21

Develop active

Research

**Communities** 

Across

**Disciplines** 

cross-disciplinary
research.

# SWAYAM Courses for Indian Knowledge System Starts; Registration Open : UGC

- The SWAYAM Courses will Open from July 31.
- The Courses are Offered in three Streams.
  - Engineering
  - Science & Technology.
  - Humanities & Social Sciences.
- SWAYAM / IKS Courses, Registration Open.
- **NEW DELHI:** The University Grants Commission today announced that the application process for **Study Webs of Active–Learning for Young Aspiring Minds (SWAYAM)** courses for Indian Knowledge System (**IKS**) has started

#### **SWAYAM Courses for IKS**

- The Objective of Humanities and Social Sciences Courses is to provide a General introduction to Indian Knowledge System (IKS).
- Sensitize the Students to the contributions made by Ancient Indians in the field of Science, Philosophy and Related Applications and Concepts.
- The Concepts and Applications in the Science Course.
- Syllabus are divided into 10 weeks. Students opting for this course will be learning number systems and units of measurement, Mathematics, Astronomy, Knowledge Framework and Classifications, Linguistics, Health Wellness and Psychology and Town Planning and Architecture.
- The SWAYAM courses have four quadrants, Video lectures, specially prepared Reading Material that can be downloaded.
- Self-assessment tests and Online Discussion Forums for clearing doubts.

# **United Nation Organization**



2015- 2030

# **United Nation Organization**

# Sustainable Development Goals (SDGs)





































### **Sustainable Development Goals (SDGs)**

- 4 Credit Course: II<sup>nd</sup> Year B.Tech. Compulsory Course.
- **Also Compulsory Course for All Faculty.**
- IIT Gohati, Started in 2021-22.
- **Course Contributed by All Different Faculties.**

Mechanical Engineering.	Computer Science.
Electrical Engineering.	<b>Education.</b>
Civil Engineering.	Social Science.
Agriculture Engineering.	Management.
Pharmacy.	Law.
Basic Sciences.	Languages.

# Sustainable Development Goals (SDGs) Concerned Department to Develop Curriculum on a Particular Theme of SDGs

S.N. of SDGs	Name of Department in AKS University
<ul> <li>No Poverty</li> <li>Zero Hunger</li> <li>Good Health &amp; Well Being</li> <li>Quality Education</li> <li>Clean Water &amp; Sanitation.</li> <li>Gender Equality</li> <li>Affordable All Clean Energy</li> <li>Decent Work and</li> <li>Economic Growth</li> <li>Industry, Innovation and Infrastructure</li> </ul>	<ul> <li>Economics, Social Science</li> <li>Agriculture</li> <li>Pharmacy, Microbio, Biotech</li> <li>Education</li> <li>Pharmacy, Microbiology, Biotech</li> <li>Social Sciences</li> <li>Environment Science</li> <li>Agriculture, Economics</li> <li>Mechanical Engineering</li> <li>Electrical, Civil, Agriculture,</li> </ul>
	Food Technology

# **Sustainable Development Goals** (SDGs) **Concerned Department to Develop Curriculum on a Particular Theme of SDGs**

	S.N. of SDGs	Name of Department in AKS University
10.	Reduced Inequalities.	Economics, Social Science, Management Science
11.	<b>Sustainable Cities and Communities.</b>	Civil Engineering, Social Science
12.	<b>Responsible Consumption and Product.</b>	Commerce & Management
13.	Climate Action	<b>Environment Science, Chemistry</b>
14.	Life Below Water.	<b>Environment Science, Bio Technology</b>
15.	Life on Land	Environment Science, Bio Technology
16.	Peace and Justice Strong Institutions	Law, Political Science
17.	Partnership for the Goal	<b>Management, Commerce, Social Science</b>

# **Employability, Entrepreneurship, Skills**

- 1. Engineering : Mechanical
- Leth Machine Workshop/Training

This Provides Employability

Entrepreneurship

- 2. Engineering: Electrical/ Skill
  - Electric Vehicles Design Course
  - Embedded System/s
  - VLSI
  - Power System Maintenance
  - System Installation
  - Electric System Design Course
  - Switching System
  - Tab Oriented Training Courses Like ITI in Electrical
- 3. Pharmacy Certificate Courses
  - Clinical Research
  - Pharmaceutical Sales and Marketing Management
  - Medical Writing
  - Public Health and Hospital Management

**Employability** 

# **Employability, Entrepreneurship, Skills**

#### 3. Pharmacy

- Modeling
- Drug Design
- Bioinformatics

#### 4. Biotechnology

- Tissue Culture
- Plant Tissue Culture
- Spirulina Technology
- Mushroom Technology

#### 5. Computer Science & Engineering

- CAD/CAM
- Cyber Security 3 to 6 Months
- Data Science Certification
- Web Design & Development
- Software & Programming Language Courses
- Artificial Intelligence Course
- Big Data Certification Program
- Ethical Hacking
- Cloud Computing Certificate Programme
- Mobile Repair

#### 6. Education

- Career Counseling Certificate Programme
- Educational Media Technology
- Content Writing
- Psychology Therapy and Counseling

#### 7. Management

- Financial Management
- Financial Risk Management
- Certificate in Quantitative Finance
- Online Certificate Course in management
- DeVOPS Certificate Program (Company's Development)

#### 8. Commerce:

- Digital Marketing Course
- Digital Marketing Certificate
- GST Taxation Certificate
- Chartered Financial Analyses
- Financial Planner
- MoU with Company Secretaries
- MoU with ACCA: Association of Chartered Certificate Accountants

#### Life Skills

#### **Basic Life Skills Curriculum: UNICEF**

http://www.unicef.org/PDF

Age Group: 14 – 23 yr

#### **❖** What are Life Skills ?

- A Group of Psychosocial Competencies and Interpersonal Skills that help People
- Make Informed Decisions, Solve Problems
- Think Critically & Creatively
- Communicate Effectively
- Build Healthy Relationships
- Empathies with Others & Cope with & Manage them lives in a healthy and Productive Manner.
- UNICEF (WHO): Developed Curriculum for Basic Life Skills.
- Objectives: To Provide Youth with New Knowledge & Opportunity
  - Novel Skills in a Safe Environment for Successful transformation to the Adulthood.

#### Life Skills

#### **Basic Life Skills Curriculum: UNICEF**

- For Youth :
  - Based in Evidence Based
     Psychosocial Methodology
     Including Cognitive –
     Behavior Therapy,
     Mindfullness ,
     Resilience Building
     Activities.
- Self Awareness
  - Stress Management
  - Emotional Regulation
  - Positive Thinking
  - Self esteem
- Interpersonal Skills
  - Empathy
  - Listening Skills
  - Interpersonal Effectiveness
  - Handling Disputes
  - Managing Relationships
  - Confident Communication

- Thinking Skills
  - Goal Setting
  - Decision Making
  - Problem Solving
  - Critical & Creative Thinking
  - Executing Function Skills
  - Resilience (Bouncing Back form Adversity).

2 Lessons/ Week /8 Weeks

Each Lesson 90 Minutes for Discussion, Activities & Group Work.

### Life Skills: UNICEF



# Life Skills by WHO

