1.5 Solving Quality-Quantity-Equity Triangle In Education: (2007)*

1. Introduction:

Since Independence The Indian Higher Education Has Grown Into One Of The Biggest Systems And Is Having Now 348 Universities, 17,625 Colleges And 10.5 Million Students In Higher Education. The Universities Have Increased In Their Types And Include Central Universities, State Universities, Deemed-To-Be Universities, Private Universities, Open Universities And Institutions Of National Importance. During The Last 15 Years, The System Of Higher Education Has More Than Doubled Mainly Because Of The State Policies Of Privatization And Liberalization And Is On The Path Of Rapid Growth And Expansion. One Of The Major Studies Of Education System During Independence Was Carried Out By The Education Commission (1964-66) And Its Report Was Titled As Education And National Development; And The Commissions Recommendations Have Guided Subsequent Educational Development Through Two Major Policy Documents, National Policy Of Education, Published In 1968 And 1986.

The Indian Constitution Adopted By The Nation In 1950 Has Given Three-Fold Package Deal To The People Of India (Naik, 1977) Providing For:

1. Adult Franchise With Equality For Women And Protection Measures For Weaker And Disadvantaged
2. Responsibility To The State To Provide For Free And Compulsory Education For All Up To The Age Of 14 Years, And
3. Minimum Essential Standards Of Living To All People.

The Constitution Essentially Tried To Decentralize The Political, Knowledge And Economic Power Concentrated In The Traditional Indian Society In The Hands Of Upper Casts Of Kshatriya, Bramhin And Vaishya And To Redistribute The Powers To All People Including The Women, Shudras And Antyajaj- The Deprived And Marginalized People In Indian Society.

During The Last 15 Years, The Nation Has Made Great Strides In Development Of Industry And Employment, Particularly In Information Technologies (It) And It Enabled Services. India Is Now Becoming Destination Of Global Industries Not Only For R&D But Also For Outsourced Services Like Bpo (Business Process Outsourcing), Which Are Slowly Getting Transformed Into Kpo (Knowledge Process Outsourcing). Indian Urge Of Education And Capacity To Achieve Higher Quality And Creativity Is Getting Recognized Globally, Thanks To The System Of Indian Education Developed Since Independence. Two Factors Are Influencing This Development, First The Knowledge Of English Language, Which Is Now Becoming The Language For Global Communication, And Cost-Competitiveness Of Our Graduates In Global 'Marketing'. India Is Dreaming To Be A Lead Developed Country By 2020 And Is Currently Achieving Higher Growth Rate Of Gnp Of About 8 % And Hopes To Raise It To Two Digits Soon.

* Aiu Special Issue

Inspite Of These Very Promising Developments, The Age-Old Problems Of Poverty, Illiteracy, Underdevelopment And Disparities – Regional, Economic And Social – Are Still

Persisting. In Fact Studies Show That The Disparities Are Widening, Farmers Are Committing Suicide In Large Numbers, Urban Slums, Social Tensions And Lawlessness Is On Increase, Possibly Because The Benefits Of Economic Development Are Not Shared With The Common People. The Policies Of Creating Quality Systems In Various Public Services Such As Education, Health, Transport, Etc., For Enabling People To Participate Successfully In Globalised Processes Of Development For Creating More Jobs And Employment Within And Outside The Country Is Affecting Indian Society In Many Ways. The Public Systems Are Languishing And Better Alternatives Are Made Available To Better Off People In Society. In Fact Education Is Now Not A Uniting But Dividing Force. The Indian Education Is Now Getting Stratified Into Four Strata - Stratification In Terms Of International Institutions, Private Institutions, Public Institutions Managed By Private Or Quality Management And Public Institutions Managed By Public Bodies – Accessible According To The Paying Capacity Of The People. The Education And Therefore Society Is And Will Be Now Getting Divided In Terms Of Quality And Cost Affordability. This Also Indicates Failure Of National Policies And Programs Followed So Far In Creating Homogeneous And Integrated Society On The Basis Of Equality And Justice. With The Present Policies Of Promoting More Of The Same, There Is No Possibility Of Creating Just And Equal Society. This Is True In Educational Development Also. The Major Issue Is, Therefore, How To Create Revolutionary Ways And Means To Give Quality At The Affordable Cost To All. The Programs Of 'Quality Education For All' Has The Chance To Succeed In The Fulfillment Of Constitutional Obligation Of Equality And Justice For All.

Pandit Jawaharlal Nehru While Inaugurating Educational Conference In 1948 Has The Following Comment To Make:

> "Whenever A Conference Is Called To Plan For Education In India, Tendency As A Rule Was To Maintain The Existing System With Slight Modifications. This Must Not Happen Now. Great Changes Have Taken Place In The Country And Educational System Must Keep Pace With Them. **The Entire Basis Of Education Must Be Revolutionalized**".

Since 1995, Major Changes Are Taking Place Worldwide; And India Is Also Witnessing Great And Revolutionary Changes Due To Revolution In Information Technology. It Is Therefore Essential To Create A New Basis For Developing Indian Education System In The 21st Century And Offer Quality Education For All, Which Amounts To Solving The J P Naik's Illusive Triangle Of Quality, Quantity And Equity In The Education Of Our People.

2. Quality-Quantity-Equity Triangle:

The Three Terms –Quality, Quantity And Equity- In The Triangle Indicate Values; The Quantity Represents Value Of Democracy. The Geometric Form Of The Jp Naik's Triangle Could Also Be Expressed In Terms Of Mathematical Form: Quality + Quantity + Equity = 0, And Is Often Called A Zero Sum Game. Efforts To Raise Quality Increase Cost Of Education, Which Makes The Education Inaccessible To Many. This Is The Case Of Top Quality Institutions, Such As Iits, Iims And The Newly Created Central Institutions For Quality Science Education Started In Pune And Kolkatta. Any Attempt To Create More Access To People Such As Starting More Affiliating Colleges For Increasing Admissions To 12th Pass Students With Government Support And Control, Increases Numbers, Reduces The Unit Cost Of Education But Decreases Quality. Solving This Triangle Will, Therefore, Mean Creating Education System That Would Offer Quality Education At Reduced And Affordable Cost To All. Sir John Daniel (Daniel, 2004) Has Shown That The Open And Distance Education System Has Successfully Solved Quality-Access-Cost Triangle By Creating

Quality Learning / Instructional Materials, Making It Accessible To Every Learner Through The Use Of Educational Technology For Deployment Of Education. The Strategy Should Be To Use It For Creating Technology Mediated Education, Which Will Have High Quality In All Its Processes Of Teaching, Learning, Evaluation And Management And To Use Access Technologies To Reach To All Learners.

3. Quality In Education:

Quality Does Not Have Unique Definition. The Concept Is Explained Either In Terms Of Objective View Or With Perceptive View. The First Objective View Of Quality Is Ofter Expressed As Exceptional. Einstein As A Scientist Or Sachin Tendulkar As A Cricketer Are Exceptional And Well Accepted Examples Of Quality In Their Fields. The Other Objective View Is Of Conformity To Standards Prescribed By An Institution. A Car Produced To The Highest Norms And Standards Is A Quality Car. This Is The Commonly Accepted Meaning Of Quality. The Perceptive View Of Quality Depends On The Situational And Individual Needs And Approaches And Has, Therefore, Varying Meaning. The Perceptive Meaning Of Quality Is Fitness For The Purpose, Or Value For The Money Or Transformative Value. The National Assessment And Accreditation Council Of India Has Taken Fitness For Purpose As The View Of Quality In Its Accreditation Methods Of Institutional Quality. Value For The Money Will Be The Satisfaction Or Fulfillment Of The Needs And Requirements Of A Learner Or A Group Or Community And Getting More Benefits And Services For The Same Fees Paid. This Is The View Of Customer Satisfaction Or Customer Delight. Judging And Assessing The Transformative Value Of Institutional Functions Or Its Educational Programs In Terms Of The Outcomes And Impacts On Developmental Achievements Of Learners And Related Stakeholders Such As Family, Community Or Environment, And On Socio-Economic Changes Is Rather An Important Approach To Quality And Should Form As One Of The Major Approaches In Judging Quality And Standards Of Education.

4. National System Of Education:

In The Report Of The Education Commission (1964-66), The Commission Has Not Only Recommendations But Also Given Detailed Scheme Of Implementing Its Recommendations. The Commission Expected Development Of The National System Of Education For India As An Outcome Of Implementation Of Its Recommendations. The Idea Of The National Education System Is Basically Rooted In The Search Of Alternatives To The Colonial Form Of Education Created By The British Rule In Introducing Modern And Western Education In India With Limited Goals, Content And Processes Of Educating- Essentially The Macaulay's Goals. The Education Commission Was Greatly Impressed By The Educational Models Developed By Mahatma Gandhi In Establishing Gujarath Vidyapeeth, Kashi Vidyapeeth, Bihar Vidyapeeth, Tilak Maharashtra Vidyapeeth And Jamia Milia Islamia As Institutions Responsive To The National And Socio-Economic Developmental Goals Of Indian People, And By Rabindranath Tagore For His Creation Of Vishwa Bharati (World And India), To Impart Education That Synthesizes Asian And Western Cultures.

The National System Of Education Is Essentially Based On Linking Education With Society And Industry To Be Achieved Through Participation Of Society And Aimed At National Reconstruction. Mahatma Gandhi's Concept Of Education Was Education For Life, From Life And Throughout Life And Gives The Higher Meaning To The Modern Idea Of Life-

Long-Learning Essential For The Learning Or Knowledge Society. In The Commission's View, The National System Of Education (Naik, 1982) Should

- Be Based On Indian Traditions And Be Suited To The Life, Needs And Aspirations Of Our People,
- Emphasize Education Of People,
- Use Regional Languages As Medium Of Instructions With Hindi As A Link Language And English As An Academic Language For Access To Universal Knowledge.
- Eliminate Differentiating Between Individuals Educated In The Modern Education System And That Of People's Education.
- Emphasize Science And Technology Education For Modernization And Elimination Of Poverty,
- Inculcate A Spirit Of Patriotism And Pride In Our Cultural Heritage,
- Emphasize Moral And Aesthetic Values

The Commission Expected That The National Education System (Nes) Should Become A Powerful Instrument Of Social, Economic And Cultural Transformation Necessary For Realization Of The National Goals.

During The Last Six Decades The Higher Education In India Has Grown In Various Aspects, Created Relevance In Professional And Vocational Education, Adopted Socially Oriented Extension Education Policies And Has Developed Into One Of The Three Biggest Systems Of Higher Education In The World. The Quality Institutions Established Mostly Outside The University System Meant For Public Have Created Graduates Who Have Proved Their Excellence And Quality In Many Developmental Fields Such As Information Technology And Has Made India Proud For Its Culture Of Learning And Capacity For High Achievements.

However, The Rest Of The Higher Education Meant For Public Has Grown In Numbers, With More Of The Same Policy, Continues To Face Many Problems And Is Languishing. The Problem Of Increasing Numbers Of Students, Under Prepared Graduates, Indifferent Teachers, Reduced Resources, Inadequate Co-Ordination Between Different Stages Of Education And The Persistent Colonial Legacy Of Affiliating Management Structure Have Deprived Indian Higher Education Of Quality, A Decisive Factor In Global Competitiveness Required In The Modern Development. (Nigavekar, 2006) Failure In Solving The Problems Arising Out Of Poverty, Ignorance, Under Development And Disparities-Regional, Social And Economic- Have In Turn Shown Adequately The Failure To Evolve National System Of Education; It Is Also A Failure Of The Educational Policies And Programs To Deal Adequately With These Issues. The Nation Has Failed To Evolve Its Indigenous National System Of Education To Address The Problems Of Its People. It Is Clear That The Expected National System Of Education Needed For Restructuring The Society Is Yet To Be Evolved. (Takwale, 2006)

5. Educational Revolution For Creating National System Of Education:

The Education Commission Has Also Suggested How To Develop The National System Of Education. The Commission Expected That The Educational Revolution Will Be Created Through Implementation Of The Commission's Report; And Students, Teachers And Other Educational Functionaries Working In Education Would Become Change Agents For The Revolution. The Central And State Governments Were Expected To Take The Lead And

Give Support In Generating The Revolutionary Changes. This Never Happened And What We Achieved Is Growth And Not The Radical Restructuring Of The Society Through Education. The Educational Revolution Proved To Be A Dream Of The Education Commission. Jp Naik (Naik, 1982 A) Has Analyzed The Reasons For Its Failure. Firstly, The Change Agents For The Educational Revolution Were Supposed To Be Teachers, Students, Managers Of Education And The State And Central Government. This Was Wrong Identification. The People Who Form The Part Of The Power Structure With Vested Interest Cannot Be Expected To Bring About Revolutionary Changes Wherein There Is Devolution Of Power And Sharing Of Benefits On The Basis Of Equality. J P Naik Identifies Five Reasons Of Failures Of Educational Revolution To Take Off:

- Separation Of Education For Students And Adults.
- Wrong Use Of Tools And Techniques- Preservation Of Formal Rigid System.
- Non-Involvement Of People.
- Failure In Improving The Living Standards Of Masses- Poverty Eradication.
- Cooling Down Of Missionary Zeal Of Educational Intelligence.

The Political Changes Brought About By The Political Freedom Of India Did Not Prove To Be Enough To Bring About Educational Revolution. Jp Naik Toyed With The Idea Of Revolution And Suggested That The Educational Revolution Can Be Started With A Revolution In Which People Are Participating (Naik, 2006). No Revolution Existed In 20th Century. The Only Revolution Available Now In 21st Century Is The Communication Revolution, And It Can Become The Vehicle For The Educational Revolution, If Right Approaches, Policies, Partnerships And Support Systems Are Established.

The Revolution Cannot Be Started Without A Strong And Committed Cadre Of Change Agents. They Cannot Be The Teachers In The Formal Institutions, As Already Indicated. One Approach Could Be To Expand The Category Of 'Teachers' To Include All Those Who Participate In Educating And Training- The Teachers, Tutors, Trainers In Industry And Community And Educated Parents. They Can Become The Change Agents. It Would Be Essential To Empower All The Stakeholders Involved In The Education And Development Of Socio-Economic And Cultural Nature. The Process Of Revolution Should Have Participation Of People- The 'Teachers And Students' On A Platform Or Support System Where People Can Wield Power With Autonomy, And Not On The Platform Of Those Who Control Power-Social, Economic And Cultural. This Is Possible Only When People Are Organized Into Communities And Empowered Through Actionable Knowledge, People's Technologies And Organisation Power. Forming Small And Big Learning And Developing Groups Of People, Similar To Self-Help Groups Or Special Interest Groups And Their Communities, Could Empower The People Organizationally And Economically. This Has Been Demonstrated Amply By The Success Stories Of Grameen Bank Of Bangladesh And Lijjat Papad, The Examples In Banking And Home-Based Industry. Development Is Always A Participatory Work, Involving Students And People, And Is Carried Out Successfully Through Cooperative Working Under A Suitable Leadership –Local As Well As Central – With Participative Culture. Development Of Leadership With Vested Interest And Commitment In Creating Communities At Local And At Central Levels Is An Important Task; And The Program And Processes Should Be So Designed And Developed That There Is No Place For Intermediaries.

One Of The Attempts To Achieve Total Revolution In Independent India Was By Jayaprakash Narayan, Who Led Student Movement For Radical Changes In Society. He Has Suggested A Process Of Empowerment Based On Education, Organisation, Creation And

Activism. The Large-Scale Agitational Component, Lack Of Creation In Terms Of Socio-Economic Development, Small Localized And Dispersed Nature Of Activities With Limited Goals, Mostly Political In Nature, Have Lead To The Failure Of The Movement. The Power Of It In Networking And Globalising Any Activity And Movement Could Now Be Used Successfully For Creating Empowerment Process. The Basic Need Is Of A Program Of Development That Is Based On Needs And Requirements Of People And Enables Them To Develop Through Learning Processes For Acquiring Knowledge, Technology And Participative Organisation. Generation Of A Developmental Process Of Sustainable Nature Is Always A Time Consuming Process And Needs A Long-Term Activity With Goals Of Socio-Economic Nature Expected By The People. Such A Program Will Need In The Present Context An Approach Of Participation Of Private And Public Agencies Involved In Specific Activities Of Development And Deployment. By Considering The Separation Of People From Public Institutions, An Unfortunate Part Of Indian Social Development, It Will Be Essential To Develop A Participatory Model In Which Public, Private And Community Can Come Together And Work Together To Achieve Common Goals With Win-Win Approach. The Most Unorganized Sector In This Participatory Process Is The People, Who Also Form The Consumers For Private Sector Products And Services, And Voters For Political Power Who Establish And Influence The Public Institutions. Forming Learning And Developing Groups And Their Interest Specific Communities Who Can Have Power To Negotiate Successfully For Protection Of Their Rights And Interests Is An Essential Feature Of Organizational Empowerment. It Is Therefore Essential To Develop A Policy And Programs Of Private-Public-Community Partnerships With Win-Win Approach For Successful Transformation That Can Lead To Socio-Economic And Cultural Transformation Expected From The Educational Revolution.

6. Information Technology As A Vehicle For Educational Revolution:

Makinley Report Based On The Studies Conducted At The Behest Of National Association Of Software & Service Companies Of India (Nasscom - Www.Nasscom.Org) Predicts Robust Growth For Indian It Services And It Enabled Service Industry And Predicts That In Near Future India Would Be The Third Largest Economy After Usa And China. Reasons Attributed To This Growth Are Due To Leadership With Strong Foundation Of

- Large Pool Of English Speaking Manpower, And
- Emphasis On Quality At Significantly Low Costs.

Use Of Information Technology Is Fast Spreading In India. Mobile Telephony Is Expected To Reach To Nearly 500 Million Indians By 2010 And 80 % Population By 2014. The Broadband Connectivity Is Expanding Fast Through Optical Fiber As Well As Through Wireless Internet. Indian Government Is Supporting It Industry By Various Ways, And Has Set Up Knowledge Commission To Support It Related Development. India Is The First Country To Put Into Orbit A Satellite Specially For Education (Edusat) For Raising Quality Of School And University Education.

Ict Applications And Promotion In India Are So Rapid That A Great Impact Is Expected In All Walks Of Economy And Society. The Changes Are Already Being Seen And Amount To A Revolution- The Information Revolution. The It Is Developing In Such A Way That Convergence Of Telephony, Broadcasting And Computing Would Occur On Two ‘Screens’- Tv Screen For Home Use And Cell-Phone Screen For Mobile Use. The Triple Play Broadband Technology Is Now Available Which Offers Through Telephone Wire Services

Of Computing With Broadband Connectivity, Telephony And Cable Tv To Every Home Within The Next 5-10 Years.

The Rapid Development Of The Newer And Versatile Technologies In It Is Expected To Change Entire Nature Of Communication. Information Technology Is Still At Its Development Stage And Will Take A Few Decades To Mature. During This Transitional Period We May Expect Not Only Spread Of It Gadgets And Applications But Also Development Of High Fidelity Internet That Can Deliver 'Immersive' Technologies And Help In Raising Overall Quality Of Life. The Major Direction Of Development Visualized By 2020 Is Of Networking Of All People And Their Institutions, Personalization Of Mass Technologies – People's Technologies And Linking Working And Living With Local, Contextual And Need-Based Developmental Processes With Globalisation Processes. Besides Massification, It Can Help Humanization Lost In The Industrial Society. (R. Venkateshan, 2005)

All These Developments Would Have Profound Impact On Education. It Would Enable To Develop Mass-Personalized Education With Just-In-Time Learning Services. Education Could Be Linked With Places Of Working And Livings Of Anyone Anywhere. Every Home, Group Of People, People's Organisations And Institutions, Industries, Communities Could Become Learning Institutions. Life-Long-Learning For Continuous And Sustainable Development Would Be The Way Of Life. Learning Can Happen Every Where From Homes To Work-Places; And Institutional Facilities Like Those At Schools, Colleges And Universities Will Be The Places For Socialization Or For Special Activities That Cannot Be Carried Out From Home Or Workplaces. Education, If Developed Properly With Ict Support, Could Be A Great Equalizer.

Wider Applications Of It In All Walks Of Life Are Creating Information Society And Knowledge Economy. Applicable Knowledge Is Going To Drive Development And, With All The Communication Technologies Enabling Access To Various Services, It Is Likely To Help Reversal Of Centralization Processes Started In Industrial Society With Concentration Of Industries And Services In Urban Cities. By Providing Urban Infrastructure In Rural Areas Essential For Cultural And Healthy Life, As Is Planned In Pura-Providing Urban Facilities In Rural Areas- The Ict May Help In Accelerating The Decentralization, And May Bridge The Rural-Urban Divide In India.

Information Technology Promotes Three Main Processes Not Found In Industrial And Agrarian Era:

- Virtualization In Which Any Organisation Or Institution Or Group Of Institutions Could Be Developed As A Distributed System Working Together And Communicating With Each Other As If They Are On A Single Campus.
- Digitization In Which Content Could Be Digitized And Communicated To Anyone, Anywhere Linked With E-Network.
- Mass-Personalization Or Customization Is A Process In Which Products And Services Could Be Customized Or Personalized Besides Their Massification,

These Are Entirely New Processes Typical Of Information Age And Did Not Exist Earlier. It Could Be Used Effectively For Techno-Social Transformation By Innovating Tools & Techniques And By Creating New Organisations To Help In The Processes Of Shaping The Society, Whose Basis Could Be Transformed From The Existing Markets Driven By Economy Alone To A Society With More Of Socio-Economic, Cultural And Ethical

Development. A New Learning Or Knowledge Society With Extensive Use Of It Will Have The Core Values Of Networking & Sharing, Transparency & Openness, Working & Living Together And Partnerships & Democracy. Human Society On The Whole Is Rising To A Higher Level Of Activities With Higher Humanization And Wide Spread Creativity And Entrepreneurships. Such A Society Will Have As Its Foundation New Organisations Appropriate To The New Age To Be Evolved From The Existing Institutions By Suitable Transformation. The Models For Creation Or Transformation Into A New Organisation Is Obviously Not Existing And Have To Be Developed By Pooling The Best From Each One And Multiplying It Though Suitable Organizational Multiplier. This Could Form The Basis For The New Consortia - Partnerships For Pooling The Best With Win-Win Approach For All Participating Members Including The Customers And Society At Large

It Provides Frameworks For Education And Development, Which Usually Consists Of Hardware For Networking, Sub-Networking And Accessing; Softwares For Governance And Management Of Learners, Teachers And Their Teaching-Learning Processes; Tools And Techniques To Create Content In Multi-Media, Store It In Meta-Databases With Reusability Of Its Objects Or Content Elements (Rlo-Reusable Learning Objects), Technologies For Deployment To Individuals And Groups Linked To Network (Knowledge Grid) And Distributed Classrooms With Broadband And Narrow Bands That Can Enable Large Numbers To Attend Lectures And Speeches Of Great Teachers And Experts And Interact With Them Synchronously And Asynchronously From Their Homes And Work / Community Places. One May Develop It Platforms That Can Enable To Offer Technology Mediated Educational Programs And Learning Services - A Distributed Institution Of 21st Century - Equivalent To Establishing An Educational Institution Of 20th Century.

7. New Paradigms Of Education:

The Basic Approach Is That The It Enabled Paradigm Of Education Can Help In Developing What Education Commission Formulated As The National System Of Education In Which People's Education And Modern University Education Can Be Integrated. The System Can Become The System For People's Education. The Approach To The Education Needs To Be Changed. By Changing The Approach From Education For Knowledge To The Education For Development, We Can Make The Basic Changes In The Education System, Which Requires Culture Of Working Together, Partnership And Sharing. The Major Task Of Such An Education System Would Be To Eradicate Poverty And Ignorance And Enable Common People To Participate In The Modern Developmental Processes.

Education For Development: The International Community, After A Series Of Regional And International Seminars Organized By Unesco, Has Approved, Through The United Nation's General Assembly, Two Major Programs Of Development:

- Millennium Development Goals (Mdg) Adopted In 2000, And
- Decade Of Education For Sustainable Development (De4sd) For The Period 2005 – 2014 Adopted In December 2002.

The Mdg Is An Overarching Framework For Development And For Cooperation; And Provide Targets For International Actions To Bring Such Visions Into Reality By

Overcoming Poverty; Improving Child, Maternal And Sexual Health; Expanding Educational Provision And Redressing Gender Inequalities In Education; And Developing National Strategies For Sustainable Development. The Mdg Program Is Followed By All Developing Countries In The World And Is Regularly Monitored Internationally By Unesco With A Goal Of Eliminating Poverty, Providing Health And Livelihood Security For All.

De4sd Emphasizes That Education Is An Indispensable Element For Achieving Sustainable Development And Stresses The Necessity To Improve Educational Systems And Designs Of Learning Programmes For Achieving Sustainable Development. Sustainable Development Is A Dynamic And Evolving Concept With Many Dimensions And Interpretations, And Reflects Locally Relevant And Culturally Appropriate Visions For A World In Which Development "Meets The Needs Of The Present Without Comprising The Ability Of Future Generations To Meet Their Own Needs". (Unesco, 2004)

Both These Programs Are The Outcome Of Aspirations, Needs And Requirements Of The New Knowledge Society Emerging In 21st Century. The Two Programs Therefore Can Form The Goals To Be Achieved Along With Cultivation Of Life-Long-Learning (L3) Process For Development. The Programs Can Form The First And Foremost Tasks For The National System Of Education.

Education Revolution For People's Development: A Program Of Big Changes Envisaged In The Education Revolution Can Happen Only When We Solve The Puzzle Of Iron Triangle Of Quality-Quantity-Equity Or Achieve Success In Providing Quality Education For All. This Is Not Possible By Any Means And Methods Of Agrarian Or Industrial Society. It Needs Tools And Technologies Of Information Age. It Involves Organisation Or Mobilisation Of People Into Learning And Developing Groups And Their Communities. What Is Needed Is A Total Innovation In Techno-Social Organisation Of A System Of Distributed Education For Development With Following Features:

1. Technology Use For Giving Total E-Governance Support Both In Administration And Academic Programs.
2. Content Organisation And Deployment Technologies On Pedagogic Principles For Learning And Developing.
3. Organisation Of Stakeholders For Life-Long-Learning (L3) And Developing.
4. New System Design With Goals And Approaches For Promoting Creativity, Innovation And Entrepreneurship Leading To Productivity And Prosperity.
5. System With Core Values For Helping Cooperative Working And Consortium Building Of Provider Organisations And Institutions As Well As Of The User Groups And Communities.
6. Built In Quality Assurance And R&D For Linking Knowledge Creation At Central And Local Levels With Their Use In Developing Institutions And Locality.

These Are Also The Basic Components For Technology Mediated Open And Distance Education (Tech_Mode Www.Mkcl.Org/Iconsent), A Platform For Provide Education Programs. The Tech-Mode System Can Help Cater Mega-Systems Enabling Millions Of Learners To Learn With Mass-Personalization. It Can Also Help In Developing Different Paradigms Appropriate To The Developmental Education Of Individuals And Learning Groups Or L-Institutions With Global As Well As Local Participation.

People's Participation On Large Scale Is Essential For Generating, Sustaining And Promoting The Educational Revolution. Following Are Some Of The It Tools And Technologies That Would Play Vital Role In Evolving New Paradigms In Education With Large-Scale Participation Of People:

- Platform For Level Playing Field For All Educational Providers So That Every Expert Or Their Group As Well As Institutions Can Offer Their Quality Education For Development To Learners Everywhere.
- People's Tools And Technologies, Which Will Help Every Student And Teacher To Participate In Technology-Mediated Education And To Obtain Best Quality Education.
- Open Education Resources For Getting Or Offering Developmental And Learning Support To Every Learner.
- Local Knowledge Creation On A Platform With Tools That Help Participatory Development Of Local Databases (Wikipedia Approach Or Wikieducaqtion), Which Would Enable Locals To Get Information, Knowledge And Apply The Useful Knowledge For Creating Products And Services Which Could Be 'Marketed' For Generating Wealth.
- Technologies To Create Virtual Communities With Specific Interests Such As Virtual Private Network (Vpn) For L-Groups And L-Communities For Development In Their Areas Of Interest.
- Distributed Systems For Learning, Educating, Working Together And Developing Systems Of Distributed Production And Services.

Many Of These Technologies And Tools Are Available, And It Industry Is In The Process Of Developing Newer Ones. This Process Of Technology Development May Last For Two-Three Decades Till It Maturates Or Reshapes Itself In A Completely New Form. The Development Is On The Basis Of Market Forces And Is Competitive In Nature. Creation Of Alternative Models Of Development With Cooperative Working To Fulfill Felt And Perceived Needs Of The Interested People Is One Of The Major Tasks Of The Educational Institutions.

A Program For Creating Consortium On A Technology Platform Along With Programs Of Teaching And Learning For Development Should Be Undertaken That Would Have Public – Private –Community Partnerships With Every Partner Playing Its Role Properly.

One Of The Major Program In This Consortium Building Is The Creation Of Open Resources For Education And Development, Creation Of Local Databases And Knowledge And Their Use In Creating Quality Teaching And Learning Services Of Formal, Nonformal And Informal Nature So That The Education And Its Quality Should Not Remain A Monopoly Of A Select Few Institutions Who Charge High Fees And Develop Their Exclusive Nature, Often Called Brand Formation For The Sake Of Market Capturing. All The Public Institutions And Socially And Democratically Committed People Should Consider It Their Duty To Create Such Open Resources Of Content, Expertise And Tools For The Use Of All. Offering Customized And Personalized Services By Using Open Resources Can Become A Good Local Business For Livelihood Of Many. Here The Principal In Operation Would Be Content Is Free And Services Are Charged. Anyone In The 'Teacher' Community Can Offer Localized And Globalised Services For Education And Development. In Fact This Creates Alternative To Current Institutionalization And Approaches Of Exploitation. This Forms An Alternate Ways To The Existing Systems. It Will Reduce The Cost Of Education, Reduce The Exploitative Processes That Have Recently Entered In Education And Offer Enlarged Access To Learning.

The Education System Based On Open Education Resources On It Platform Is The Way For Successfully Solving Quality-Quantity-Equality Triangle For The Benefit Of The People. It Also Helps In Creating A National System Of Education For Offering Quality Education For All And Offers Creative Opportunities To Evolve Developmental Paradigms Appropriate To Locality And Developing Nature Of Our Society. People Below Poverty Line And Extreme Underdevelopment Will Still Not Be Able To Use The Facilities For Their Progress. Supporting These People In Their Learning And Developing Is A Task Of Society And The State. Policies And Programs Should Be So Evolved That People Are Enabled To Participate In This Educational Revolution.

References:

1. Report Of The Education Commission (1964-66): Education And National Development, Vlo.I; Ministry Of Education, Government Of India, Delhi 1966.
2. Naik J P (1977): Convocation Address In Precious Thoughts, University Of Pune Publication, Pune 1994
3. Naik J P (1982): The Education Commission And After, Allied Publishers Pvt. Ltd., Bombay 1982.
4. Naik J P (1982 A): Educational Development In India During The Next Twenty Years: 1981-2000; Bulletin Of The India Institute Of Education, J P Memorial Issue, Vol Iii, Iie Publication, Pune 1982.
5. Unesco (2004): United Nations Decade Of Education For Sustainable Development, Unesco Publication, Oct. 2994 (Www.Unesco.Org)
6. Nasscom- National Association Of Software & Service Companies (Nasscom, < Www.Nasscom.Org>
7. Ravi Venkateshan, Nasscom Newsletter, February 2005
8. Ram Takwale: Vision Of Institutionalizing New Ideas Of The Education Commission With A Focus On Open And Distance Learning, Invited Paper For The Niepa Seminar To Be Held In December, 2006 (Unpublished)
9. Sir John Daniel, Paul West (Col), Susan D'antoni (Unesco-Iiep) And Stamenka Uvalić-Trumbić (Unesco) : E-Learning & Free Open Learningv Softwares: The Key To Global Higher Education ; Presentation At The International Seminar On Distance, Collaborative And Elearning, Kuala Lumpur, Malaysia (4 - 5 January 2006) (Www.Col.Org)

Sir John Daniel : From The Triangle To The Pentagon:Open Universities In The 21st Century: Presentation At The Asian Association Of Open Universities 2004 Conference On Quality Education For All:New Missions And Challenges Facing Open Universities: Shanghai, China, 28-30 November 2004 (Www.Col.Org)