

LOK SATTA People Power

Higher Education in India Promise vs Fulfilment

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"Now that I have a college education, maybe I'll be able to save enough money to pay for my college education."

www.claybennet.com



India's USP ?

- India has one of the world's largest English-speaking, technical manpower pools:
 - 5 x 10⁶ scientists, engineers and technicians. Over 1.0 x 10⁶ engineers alone!
 - 3.0 x 10⁵ (6%) engaged in R&D; 4.5 x 10⁵ allopathic physicians
 - 2.0 x 10⁵ agricultural graduates, 4.0 x 10⁴ veterinarians



India's USP ?

Degrees dime a dozen



(True for other degrees also) Harley Schwadron

- <u>Graduates:</u> 9.5 x 10⁶ in liberal arts, 4.5 x 10⁶ in sciences, 5.0 x 10⁶ in commerce
- <u>Post Graduates:</u> 4.5 x 10⁶ in liberal arts, 1.0 x 10⁶ each in sciences and commerce
- 1100 colleges produce 3.5 x 10⁵ technologists each year - 60% from four southern states alone!

But...



...numbers hide a grave crisis

Finest scholars are emigrating. Indian students form the largest foreign group in US universities (> 75,000).

Most graduates lack basic communication skills and problem solving capacity.

Higher education and Advanced degrees?

- Low wealth creation
- Educated unemployment

Communication & Problem solving skills !



"Please help ma'am. I need support to write my Ph.D. dissertation on *Successful Fund-raising Techniques*."

Harley Schwadron



Water water everywhere ...

• ...yet India faces acute shortage of capacity in health care, education, justice delivery, law and order.

• Huge mismatch between societal needs and human resources

• Primary function of higher education - to add real value to human resources, produce wealth creators and genuine problem solvers.



The Vicious Cycle

Lowered university standards

Poor school education

Collapse of higher education

Denial of good teachers to schools

Functional literacy itself quite low ~ 20%



Positive Factors - Opportunities

- Youngsters ambitious, hard-working, highly motivated
- Parents willing to pay for good education
- Indian tradition treasures learning and scholarship



"But Father, I don't want to study space time temporal theories in relation to collapsing pulsars, I want to do my own thing!"

Hagen, Ralph



How and where to reform?

Higher Education Reform should focus on five key areas:

- Resources and infrastructure
- Teaching and Mentoring
- Course content and syllabus
- Examination system and testing mechanisms
- Accountability and standards
- Research, problem-solving, community interaction

'non-monetary reforms'

Focused non-monetary reforms could have a huge impact



Teaching and Mentoring

- Quality of teaching appallingly low
- **'In-breeding' in universities; no cross-fertilization of ideas**
- Political patronage, in-fighting, caste-prejudices
- Need for mentoring, not mere lecturing

Simple, non-monetary solution:

University graduates need to be placed outside their *alma mater*



Course Content and Syllabus

Designing appropriate courses!



Med School 101... "Affordable Diseases" Med School 302..."Unaffordable Diseases"

Harley Schwadron

- Rigid, inhibiting academic set-up
- No opportunities for both students and teachers to express creative talent
- Students, teachers have little say in course and syllabi structure. No ownership in classrooms.
- Knowledge artificially segregated into water-tight disciplines



Course Content and Syllabus

- Excessively narrow technical focus
- Still, lack of conceptual clarity
- Humanities and Communication Skills increasingly being ignored

Elective System offers way out. Designed by Charles Eliot of Harvard University in the 1870s.

Our own IITs offer humanities, 'minor' degrees for students.



"# 1 Best seller on college campuses. How to say "send money" in 101 languages."

Harley Schwadron



Examination System and Testing Mechanisms

- Exams even at varsity levels test rote memory.
- Need to redefine academic 'success'
- Test analytical skills, application of knowledge, problem-solving capacity and innovation
- Evaluating communication skills also vital



"I really crammed last night."

Hagen, Ralph



Accountability and Standards

- Student evaluations
- Peer- and Management- Evaluations
- 'Independent metrics' to grade competency and performance – research publications, research projects and funding

Interaction with Community

- Addressing real-world problems
- Generating creative solutions
- Integrating curriculum with real-world problems





"Well, don't just stand there boy! Start supporting yourself!"

www.bized.ac.uk

