KNOWLEDGE TRANSFER, INNOVATIONS DEVELOPMENT AND PARTNERSHIPS: LESSONS FROM LEADING UNIVERSITIES

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Knowledge Sharing

“Sharing Knowledge occurs when people are genuinely interested in helping one another develop new capacities for action; it’s about creating learning processes.” ……Peter Senge

“Share your knowledge. It’s a way to achieve immortality” Dalai Lama

Efficient Knowledge Sharing System

1) A first stop guidance centre for external stakeholders
2) Functional, coordinated structure & systems for:
   - Research identification
   - community engagement,
   - knowledge sharing e.g. among institutions
   - research dissemination to promote innovation uptake…e.g. to industry
   - Extension: Knowledge / Technology transfer to primary users

Support to Knowledge and Technology Management

1) Unit (s) coordinating Research management, Knowledge Transfer and Technology development & commercialization from EACH university entities

2) Clear Policy (ies) and detailed regulations to guide:
   a. Extension education / knowledge sharing
   b. Technology management
   c. Consultancy services

Support …… (cont'd)

3) Systems to negotiate agreements between actors involved in innovation e.g. incentives to research teams, industry, etc.

4) Systems to ensure information on above 3 issues is known and constantly reinforced to all university staff
   - deliberate induction of each new recruit

Lessons: Knowledge & Technology Transfer

1) **MSU Extension**: For all extension education activities from colleges that need to engage communities.
   - Done through ***Four institutes***: Agric & Agribusiness; Health & Nutrition; Children & Youth; Community, Food & Environment.

2) **HSPH**: No specific research dissemination strategy / extension function (but there's one in Harvard Dept of Social & Behavioural Science

Lessons: KTT (cont'd)

3) **Tufts - FIC**: Handles mostly applied / devt. Research

Has no special units for Extension **BUT** each research project builds in a research uptake component.

Builds Partnerships with:

- NGOs to help create Community engagement links
- Ministry and local government officials to contribute to research questions
- Communities by sharing Research findings through Community talks; Briefing papers; Reports, etc.
- Households by giving feedback – a motivation especially in longitudinal studies

Lessons: Evaluation of knowledge sharing

Clear Criteria e.g. for MSU Agric Extension in 2017/18

- Education on research-based practices & technology – to13,000 farmers
- Resultant improvement: increased yield, improved quality or decreased inputs - on 580,000 acres:
- Program Participants: 149,000 adults & 210,000 youth
- E-Newsletter recipients: 61,000
- Electronic Topic areas handled: 90
- Extension Website visitors: 5.3 million; Web page visits: 9.7 million

Lessons: Innovation / Technology Promotion

1) **MSU Technologies**: Semi-autonomous technology / promotion institution - examine research results to identify inventions that benefit the public; Protect, market, and license technologies; Invest into initial processes of technology upscaling; managing relationships & expectations of researchers
   - identify & negotiate licensing agreements with industry who can make full blown investments
   - Have clear policy on distribution of royalty from licensing agreements, structure of monetary aspects for innovators, university, industry, etc.

2) **HSPH Strategic Projects & Devt**: Built such a repute that industry do reach out to request research ***OR*** are willing to pay for research to help them develop a product (innovations) relevant to public health

Promotion & Growth Evaluation

1) Document terms that will incentivize (rather than penalise) human resource largely involved as:

- Extension educators
- Clinicians
- Applied/community engaged researchers
- Teaching faculty
- Administrators

….Evaluation (cont'd)

2) College specific appointments/workload for faculty and staff depending on circumstances

3) Category specific evaluation criteria and parallel, differentiated systems of growth and promotion for such categories

4) Consider a wider range of outputs than academic / scientific publications

Lessons: Parallel Staff Growth System

RESEARCH FOCUS

Assistant Professor

Research Director

Senior Researcher

Researcher

ACADEMIC FOCUS

Prof

Assoc Professor

Senior Lecturer

Lecturer

EXTENSION FOCUS

Senior Educator

Educator

(3- 6 years step process)

Lessons: Different evaluation standards & Separate committees

RESEARCH

- Content
- Innovativeness of research
- Value of research to community

TEACHING

- No of Courses / Curriculum Developed
- No of students supervised

EXTENSION

- Successfulness of adaptation of technology (ies)
- Number of communities and people reached
- Number and quality of extension education resources, policy briefs, publications useful to / directly utilized by communities, etc.

Lessons: Staff appointments

1) Designated (administrative) Duty:
   - 50% Research Integrity Officer…+++ 50% Research & Teaching
   - 50% Dean….+++ 50% research…e.g. grad student supervision, etc
   - 75% Director…+++ 25% research – writing grants, PhD student supervision.

2) Dual / multi Appointments:
   - Researcher (75%) and extension educator (25%)
   - 50% Teaching and 50% extension
   - 50% Extension; 30% Research & 20% Teaching

Lessons:….appointments (cont'd)

3) Single Appointments: 100%
   - research load – e.g. specific to M&E and publishes articles from that
   - extension education load
   - Administrative load – course release

4) Partial appointments e.g. 2 days per week for activities specific to supporting staff e.g. grant writing, budgeting, skills enhancement, sensitisation sessions, etc.

Relevant remuneration policy & guidelines depending on college & appointment are available

COLLEGE ADVISORY BOARD / COMMITTEE

Academics are encouraged to work with non-academic knowledge holders to co-design, co-produce, and co-implement new knowledge, new priorities and mutual learning processes.

Committees inclusive of ***faculty*** and key end-user stakeholders e.g. target community, industry players, entrepreneurs, etc. to guide on:

- trends, needs and other aspects for innovations relevant to changing social and business landscape
- knowledge transfer strategies , upscaling, etc.
- applied research & extension education needs
- necessary competency areas for students
- Systems for building good repute for College / university so people will want to associate

University Based Partnerships: Multidisciplinary Research

An important component in enhancing wholistic KTT

Lessons:

MSU's Ag-Bio Research "Unit": Focus on interdisciplinary research:

- within and between colleges
- with industry & Government involvement
- sharing of Campus & Off-Campus research stations by collaborating units

Wrapping up…….

…..Peter Senge Quote:

“You cannot force commitment, what you can do…You nudge a little here, inspire a little there, and provide a role model. Your primary influence is the environment you create.”

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