Role of quality assurance and programme accreditation in supporting development of innovative agricultural curricula

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Advanced Organizer
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Purpose of this work—
—to examine the role of quality assurance and programme accreditation in supporting development of innovative agricultural curricula between two “core” regions, the U.S. and Europe.
Founding purpose of higher education

As the oldest university in Europe, the University of Bologna stated its purpose: “to establish a ‘societas di socii’—groups of students—and was declared a place where research could develop independently from any other power.”
**Assumptions**

Globalisation, competitiveness, and mobility trends will continue to correlate to population growth, impacts of technology, environmental degradation, migration-immigration, and global conflict.

The faculty reward system does not match the full range of academic functions and that professors are often caught between competing obligations.

Expect disruptive innovations.
Quality Assurance

Quality is complex, multidimensional, and difficult to measure, but it plays a crucial role in the development of innovative agricultural curricula.

We need to converge on what we actually mean by academic quality (Van Damme, 2002).
Quality Assurance Framework—

Weiser (1995) developed a quality assurance framework incorporating teaching and learning, discovery, artistic creativity, integration, and application. Weiser recognised mission and responsibilities, saying “scholarship is creative intellectual work that is validated by peers and communicated.”

Strong staff support for improvement, communication and innovation purposes related to quality assessment. They found less support for motivation and control purposes (Rosa, Sarrico & Amaral, 2012).

There is need for a broad international consensus on what the core standards of academic quality should be.
Quality Assurance—

—recognises the contributions that research makes to the body of scientific knowledge.

These quality indicators must include Web of Science citation impacts, domain-specific niche research, professional publications in the niche, and practical products with utility for public good.

Quality assurance is enhanced by peer-evaluation and rigorous research, as well as student evaluation data. Relevance to the student and the society is a crucial indicator of quality assurance.

The weights of these indicators should match the culture, philosophy, mission, and goals of the university.
Purposes of Accreditation

From the roots as “trustworthiness.”

Accreditation is to recognise and endorse quality education at the institutional and programme levels while branding counterfeit entities.
European Purposes of Accreditation

• European dimension to quality assurance is to promote mutual trust and improve transparency while respecting the diversity of national contexts and subject areas (Thune, 2009).

• System monitoring and evaluation at the higher education level is carried out by means of external and internal quality assessment mechanisms.

• Criticism of failing to address issues concerning learning outcomes.

“It could be argued that the current spread of accreditation in Europe is an indication of increasing interest in control and compliance with academic standards” (Stensaker, 2011).

Accreditation is becoming one of the most popular methods for external quality assurance worldwide.
U.S. Purposes of Accreditation

Accreditation is, at its core, an effort by colleges and universities to self-regulate.

Independent of government and performed by private associations, but it is interrelated to the U.S. Department of Education.

Provides recognition in the private, nongovernmental sector and is associated with 52 recognised national accrediting bodies and six principal regional agencies.

There is a plethora—more than 75—of specialised and professional accreditors.
Six Core Values of Accreditation

“Integrity, Continuous Quality Improvement, Peer Review/Self-regulation, Accountability, Student Learning, and Transparency” (SACSCOC, 2011).

U.S. accreditation brings increased recognition of their institutions, assurance to students, a sense of collective engagement and ownership among faculties, and increased mutual trust, control, professional autonomy, and accountability (SACSCOC, 2011).

Responsible for assuring accountability to the public through traditional methods of self-regulation . . . facing increasing pressure from the federal government to impose prescribed accountability measures.
Private Ranking Agencies—

—may be a disruptive innovation.

Quacquarelli Symonds (QS), / US News & World Report, / Times Higher Education World University Rankings, / Thomson Reuters, / Academic Ranking of World Universities (Shanghai Jiao Tong), / Center for World University Rankings (Jeddah, Saudi Arabia) / others.
Current Status

Accreditation hinges on two issues:

(i) the development of international competitiveness through integrated policies and programmes; and

(ii) adjustments resulting from student mobility, mutual recognition agreements, and new delivery modes.

Three major concerns—Accountability, Costs, and the Changing Structure and Delivery of Higher Education.

Innovation should be encouraged by opening up accreditation to non-college providers of higher education.
Analysis—European EHEA / Bologna Process

Bologna process has transformed the face of European higher education.

Accomplishment include degrees and qualifications, quality assurance, social dimensions, effective outcomes and employability, lifelong learning, and mobility.

It is a complex phenomenon, with positive and negative social impacts, embracing economics, culture, identity, politics and technology.

Accreditations’ dilemma of serving two masters—universities and governments.
Analysis—US Accreditation Process

Substantial argument for non-governmental accreditation with a minimum of partisan influence.

From an era of historical trustworthiness and judgments to a culture of measurement, evidence, performance and impact.

Failing to document student learning, lacking academic rigour, limited student engagement, a lack of basic skills, student attainment and achievement, and workforce skills.

Three options for restructuring—(i) refocus accreditation on quality; (ii) redesign accreditation to promote competition and innovation; and (iii) keep recognition of accrediting agencies independent and free from politics.
Measurement—

"If you can measure that of which you speak, and can express it by a number, you know something of your subject; but if you cannot measure it, your knowledge is meager and unsatisfactory." — William Thomson, (Lord Kelvin)

"Draw a flowchart for whatever you are doing. Until you do, you do not fully understand what you are doing. You just have a job." — W. Edward Deming
Innovation and the Development of Agricultural Curricula

Innovation, sometimes disruptive, in curriculum development is essential for progress and often comes from the margins of the academy.

Govindarajan (go-vin-da-RAH-jin) and Trimble (2010) expound on six crucial concepts* that underpin the parable and offer valuable insight on the development and execution of innovative agricultural curricula.

A process by which a product or service takes root initially in simple applications at the bottom of a market and then relentlessly moves up market, eventually displacing established competitors.”
Disruptive Innovation

Christensen, Horn, Soares and Caldera (2011) examined online education as an emerging disruptive innovation and concluded, it “presents an opportunity to rethink many of the age-old assumptions about higher education.”

When one vector drives prices down and the second vector represents non-consumption in the marketplace—there will be huge changes in economic growth, competition, and technology (Christensen, 2015).
Promising Practices
Seven promising quality assurance practices emerged—

- Curriculum is the guidebook for student learning and it begins with purpose, experiences, systematic organisation, and measured learning outcomes. Faculties are the process leaders on the front line.

- While student learning is the raison d'être, quality is the defining element for higher education.

- Student learning and quality teaching are inextricably linked and interdependent processes.

- Ultimately, four assessment criteria explain university priorities—academic scholarship (teaching, research, service), demands of the subject matter, relevance to society and viability. More—
Seven promising quality assurance practices emerged—More—

✓ Quality assurance is enhanced by peer-evaluation and rigorous research, as well as student evaluation data. Baseline indicators include teaching, research and public good.

✓ Improvement, communication and innovation are drivers of quality among professors, while motivation and control have less impact.

✓ The two greatest challenges to future quality in higher education are balance between continuity and change and synergy between internal and external assurance while meeting the obligations of public trust.
Six promising accreditation practices emerged—

✓ Accreditation is a bond of trust affirming the purpose, experiences, organization, and measured, scalable learning outcomes.

✓ Accreditation should accurately delineate standards using qualitative and quantitative measurements and boundaries.

✓ Policies for accreditation should recognise internal and external standards, provide student protection, provide independently-verified information, and improve and enhance quality.

3 More—
Six promising accreditation practices emerged—

- All external quality assurance processes should be devised specifically to ensure their fitness to achieve the aims and objectives of the institution.

- Institutional accreditation should be free of political influence while being responsible to stakeholders.

- Framework should fit national qualifications into a comprehensive common system of quality assurance, learning outcomes, recognised programme standards, cultural values, and accreditation.
Five promising innovation practices emerged—

- Innovation is crucial to the development of curriculum.
- The ability to measure innovation is essential to a long-term improvement strategy in education.
- Faculty reward systems often do not match the academic functions and professors are often caught between competing obligations.
- Six crucial concepts underpin the development and execution of innovative agricultural curricula.
- Technology, including online education, is well positioned as a disruptive innovation.
Conclusions—

We are living in turbulent times.

“The greatest danger in times of turbulence is not the turbulence – it is to act with yesterday’s logic” (Drucker).

Expect disruptive innovation (Christensen).

Learning and innovation go hand in hand.

*Be bold!* (Borlaug).
14 Characteristics of High Performing Universities.

Thank you ~ and God’s speed in your work together.
14 Attributes of High Performing Universities—
1) Improving instructional technology and library resources
2) Improving technological infrastructure and facilities
3) Improving outreach, community development, and extension
4) Improving administrative services
5) Improving research, development, and innovation
6) Increasing institutional capacity building, resource management, sustainability
7) Providing short-term human capacity building and short-term staff training

More--
14 Attributes of High Performing Universities—More

8) Improving curriculum development, and design of academic programs
9) Addressing gender issues
10) Providing long-term human capacity building and long-term staff training
11) Improving faculty teaching, scholarship, writing, and student services
12) Developing student leadership and student services
13) Improving environmental practices
14) Engaging stakeholders, donors, and partnerships
Making Innovation Happen—Six Crucial Concepts

1. Divide the Labor
2. Assemble the Dedicated Team
3. Manage the Partnership
4. Formalize the Experiment
5. Break Down the Hypothesis
6. Seek the truth

(Govindarajan & Trimble, 2010)