



HIGHER EDUCATION DEPARTMENT  
MINISTRY OF HIGHER EDUCATION MALAYSIA

KNOWLEDGE TRANSFER PROGRAMME – KTP  
(Program Pemindahan Ilmu)

POLICY

KTP POLICY

2011

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MINISTRY OF HIGHER EDUCATION MALAYSIA

## 1.0 BACKGROUND OF KNOWLEDGE TRANSFER PROGRAMME (KTP)

1. KTP recognises a broad range of activities to support mutually beneficial collaborations between universities, industries and communities (government agencies/non-government organisations (NGOs)/public sector).
2. It provides the platform for the exchange of tangible and intangible intellectual property, expertise, learning and skills between academia, industry and the community.
3. The forms of interactions may include joint research, consultancy, education, training, graduate development, conferences, sharing of physical facilities and student placements.
4. Public Higher Education Institutions (IPTA) should effectively engage with industry and community towards mutually beneficial initiatives through role played by:
  - **Academia:** able to incorporate relevant and up to date knowledge from industry and the community into their teaching, learning, research and consultancy activities.
  - **Industry:** can utilise the resources of IPTA to enhance their business capability and economic activities.
  - **Community:** can benefit from the knowledge generated in IPTA to improve quality of life within the community.
  - **Graduated/Postgraduate Intern:** enhance their personal and professional development

### 1.1 Objective of Knowledge Transfer Programme (KTP)

To recognise and promote the transfer of knowledge via the exchange of creative and innovative ideas, research findings, experiences and skills between IPTA, research organizations, industries, government agencies and the wider community.

### 1.2 Goal of Knowledge Transfer Programme (KTP)

To enable the development and improvement of the quality of products, services and policies to be shared for mutual benefits between the stakeholders i.e. academia, industry, community and the graduated/postgraduate intern.

### **1.3 Current status of Knowledge Transfer Programme (KTP) of IPTA in Malaysia**

1. IPTA do implement KTP, however they are not comprehensive.
2. The practices and approach varies among the IPTA.
3. Poor correlation between investment in time and resources versus the impact currently produced.
4. Thus there is a need for a structured and systematic national KTP framework.

### **1.4 Issues and Challenges of Knowledge Transfer Programme (KTP)**

1. Issues
  - Mismatch between the needs of the industry and the available resources in IPTA.
  - Communication problems among stake holders.
  - Lack of access to information among parties involved.
2. Challenges
  - Insufficient expertise in IPTA in some sectors.
  - Convincing the industry that grade is not the only factor for internship eligibility.
  - Industry perception of “subsidised rate” for consultancy work by IPTA.
  - Lack of laboratory certification IPTA.
  - Lack of readiness and willingness of industry/IPTA to share their expertise and facilities.

### **1.5 Rationale of the Knowledge Transfer Programme (KTP) Policy**

1. To encourage and recognise engagement between industry/community and academia in order to support the implementation of New Economic Model (NEM) of Malaysia in creating a knowledgeable and high income nation.
2. To provide a meaningful platform of exchange that facilitates the identification and matching of appropriate expertise in IPTA to address industry and community needs.
3. To optimise the potential of IPTA expertise through coordinated interactions with stakeholders.
4. To nurture the interactions between the stakeholders for sustainable and productive partnerships.

## 1.6 SWOT analysis of Knowledge Transfer Programme (KTP)

### 1. Strength:

- Expertise and capacity of academic and non-academic in the University.
- University as the pool of innovative ideas.
- Abundance of volunteerism among university students and staff.
- The autonomy to engage the community.
- Long and proven track records in community engagement and services.

### 2. Weakness:

- Lack of formalization of partnership and commitment from the experts in the University.
- Measurement of impact social innovation projects especially the intangibles.
- Documentations of all KTP projects.
- Wide and varying definition of the scope of the knowledge transfer.
- No clear connection with the target groups.
- Level of rewards and recognition varies between Universities.
- Lack of governance and leadership at University level in support of KTP in community engagement.
- Varying ecosystem within individual Universities

### 3. Opportunities:

- Potential to enhance & enrich current knowledge through KTP initiatives exist.
- The need to preserve good and noble values and passion in existing initiatives.
- Enhancing meaningful community services in community engagement.
- Paradigm shift from current service-oriented to scholarly-oriented community project.
- Empowerment and capacity building of the recipient groups.
- Possible partnership with more focused NGOs.
- Reciprocity of knowledge transfer and exchange.

### 4. Threat:

- No clear policy in existence to support KTP in community
- Reluctance of the academic staff to engage in the knowledge transfer.
- Lack of commitment and support by certain industry on community engagement.

## **2.0 STRATEGIC THRUSTS OF THE KNOWLEDGE TRANSFER PROGRAMME (KTP) POLICY**

1. Enriching the quality of human capital in IPTA, industries and communities via knowledge transfer including teaching, learning, research and services.
2. Strengthening accessibility of knowledge transfer from IPTA to spur industry growth, community development and quality of life.

### **2.1 Strategic Objective 1: Enhance and Enrich Current Knowledge Transfer in IPTA**

*Through*

1. Identifying and implementing potential project,
2. Strengthening both curriculum and co-curriculum in IPTA based on industry and community,
3. Building capacity of academia and students in IPTA,
4. Integrating KTP initiatives of IPTA into academic program of other related institution of learning,
5. Shifting the current service-oriented to scholarly-oriented community project with outcome to the target group.

### **2.2 Strategic Objective 2: Knowledge Transfer Programme (KTP) as Catalyst for Community or Industry Growth**

*Through*

1. Implementing meaningful projects with industry or community which are sustainable and have measurable outcome,
2. Empowerment and capacity building of the recipient industry or groups,
3. Strategic partnership with stakeholders,
4. Reciprocity of knowledge transfer initiatives between stakeholders.

## **3.0 FRAMEWORK OF THE KNOWLEDGE TRANSFER PROGRAMME (KTP) POLICY**

1. Establish partnership framework.
2. Criteria for selection of projects.
  - The organisation must have a specific business need which will be enhanced through the KTP.
  - IPTA must have competency to meet the organisation's business need.

3. Establish KTP programme committee.
4. Establish permanent secretariat for KTP at USM.
5. Briefing and buy-in by stake holders.
6. National roll-out and implementation of KTP projects.

### 3.1 Roll-out and Milestone and Achievements of Knowledge Transfer Programme (KTP)

No.	Action	Timeline	Responsibility
1	Establish partnership framework	Jan 2011	USM & MoHE
2	Criteria for selection of projects	Jan 2011	USM & MoHE
3	Establish KTP programme committee	Mac 2011	USM & MoHE
4	Establish permanent secretariat for KTP at USM	Mac 2011	USM & MoHE
5	Briefing and buy-in by stake holders	Mac 2011	USM & IPTA
6	National roll-out for KTP projects (Phase 1)	May 2011	IPTA
7	Periodic Report of KTP Projects by Project Leader	Dec 2011	IPTA, USM & MoHE
8	Roadshow for First Rolling Plan – Phase 2	Dec 2011	ROADSHOW COMMITTEE & IPTA
9	Periodic Report of KTP Projects by Project Leader and Partner	Mac 2012	IPTA, USM & MoHE
10	National roll-out for KTP Projects (Phase 2), Launching and Conference	Mac 2012	IPTA, USM & MoHE

### **3.2 Governance of Knowledge Transfer Programme (KTP)**

1. Composition of Secretariat of KTP to consist of the following:
  - Chairman - Professor Dato' Omar Osman, Vice Chancellor, Universiti Sains Malaysia
  - Secretary – Professor Haslan Abu Hassan, Director, Centre for Education, Training and Research in Renewable Energy & Energy Efficiency (CETREE), Universiti Sains Malaysia
  - *Members* -
    - Representatives form MoHE
    - Representatives from IPTA
2. Each IPTA's KTP to be governed by new or similar structure realigned within existing Industry Relations unit.
3. Secretariat of KTP at USM is entrusted to provide continuous advice on KTP activities to IPTA including overall administration and implementation.
4. Each IPTA need to set up industry and community relation office, which should benefit all parties.
5. Setting up and maintaining a national academic and industry expert registry.

### **4.0 KEY RESULT AREA (KRA) OF KNOWLEDGE TRANSFER PROGRAMME (KTP) FOR 2011 – 2012 FUNDING PROGRAMME**

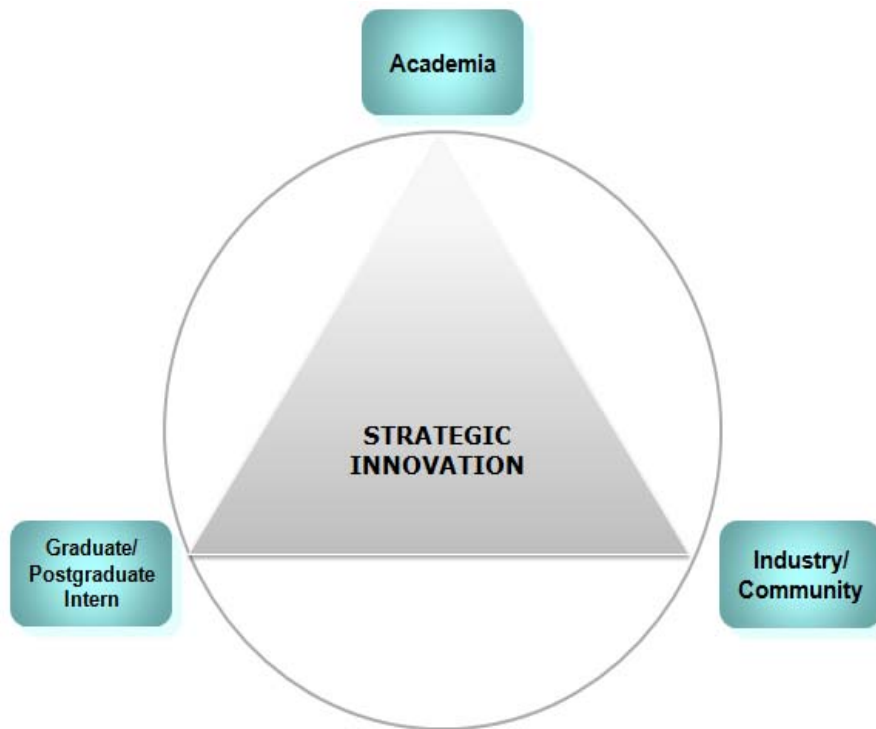
5 KRA identified are in the field of:

1. Education - raising level of education in certain areas.
2. Economic gains for sector/s of industry in identified sector.
3. Sustainability and Green Technology Initiatives.
4. The Disadvantage groups.
5. Developing Industry Relevant curriculum (for High Impact sector).

### **5.0 KNOWLEDGE TRANSFER PROGRAMME (KTP) MODEL OF IMPLEMENTATION**

1. The project should be classified under 5 KRA.

- KTP Programme shall includes the involvement of the following as shown in figure 1 below:
    - a. **KTP Graduated/Postgraduate Intern** - Graduated students, Postgraduate students or Undergraduate students final year projects/interns
    - b. **KTP Academia** - Lecturer or university's staff identified in the KTP Programme
    - c. **KTP Industry/Community** - Identified by KTP-IPTA
2. KPI = the measurement in 1a-1c.
  3. The project = the identified KTP Programme per location/firm/community/target group.
  4. Project may be replicated to other identified KTP Project of similar nature but different location/firm/community/target group.
  5. KTP project committee is allowed to vary the provisions of financial limit after considerations of nature of projects.



*Figure 1: Model of Implementation - KPI Measurement*



### 5.1 Knowledge Transfer Programme (KTP) Implementation Plan

The projects for the first phase of the 10th Malaysian Plan would be roll-out based in the following detail with the cost breakdown for the implementation plans is as follows:

Project Duration	IPTAs Involved	Cost Breakdown
2 years (2011-2012)	20	<ul style="list-style-type: none"> <li>• Salary or subsistence of the KTP Intern</li> <li>• The overhead and administrative of project</li> <li>• Costs of the Intern's training and development</li> <li>• Administrative support</li> </ul>

*Table 1: KTP Roll-Out Detail & Cost Breakdown*

### 6.0 IMPACT MEASUREMENT OF KNOWLEDGE TRANSFER PROGRAMME (KTP)

1. KRA will be determined by MoHE.
2. Impact measurement to be approved by KTP Project Committee.
3. Impact measurement – at the end or annual basis.

### 6.1 Example Impact of Knowledge Transfer Programme (KTP)

No	KRA	Impact Measurement	Proxy Indicator (Intermediate Measurement)
1	Education – raising level of education in certain areas	% improvement in public examination identified e.g. SPM or PMR or English or Science	Progress in school based assessment
2	Economic gains for sector/s of industry in identified sector	% of increase of profit or income generated	3 month cash flow average - or Financial ratios
3	Sustainability and Green Technology Initiatives	% of increase of profit or income generated	Measurement related to the technology infused - e.g. reduction in energy bill
4	The Disadvantage groups	% of increase in annual income for target groups	Periodical reports attest by social department
5	Developing Industry Relevant curriculum (For High Impact sector)	Acceptance of curriculum by industry and applied by Education institutions	Progress reporting

*Table 2: KTP Impact Measurement*

**7.0 SECRETARIAT OF KNOWLEDGE TRANSFER PROGRAMME (KTP)**



**CHAIRMAN OF KTP:**  
PROFESSOR DATO' OMAR OSMAN  
Critical Agenda project – Knowledge Transfer Programme (KTP)  
Ministry of Higher Education Malaysia  
c/o  
Vice Chancellor  
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*On behalf of:*

**HIGHER EDUCATION DEPARTMENT  
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*"KNOWLEDGE FOR ALL"*