

## The Knowledge for Development Program

# K4D Newsletter

The World Bank Institute

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<http://www.worldbank.org/wbi/knowledgefordevelopment/>

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Welcome to the fifth issue of the Knowledge for Development (K4D) Program Newsletter. This newsletter is published quarterly to keep colleagues at the World Bank, country clients, partner institutions, and the general public updated on latest developments regarding the K4D Program. This issue includes a synopsis of recent knowledge economy assessments, details on various forthcoming K4D learning events, and a farewell message from K4D program manager, Carl Dahlman. Jean-Eric Aubert, who is based in Paris, has taken on the role of Acting Manager for the K4D Program.

We welcome any comments, suggestions or feedback you may have and invite you to contact us at [ke@worldbank.org](mailto:ke@worldbank.org).

### Farewell to Carl and Robert

The first quarter of 2005 saw the departure of two senior members of the K4D team, Carl Dahlman and Robert Whyte. Carl Dahlman, manager of K4D since its inception in 1999, decided to take early retirement from the World Bank and has accepted a full-time position at the prestigious School of Foreign Service at Georgetown University as the Luce Professor of International Affairs and Information Age Technologies. Below is a farewell message from Carl.

As of February 2005, Robert Whyte assumed the position of Senior Investment Promotion Officer in the Multilateral Investment Guarantee Agency (MIGA). He is currently with the MIGA Operations Asia Team and is focusing on South Asia.

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#### A message from Carl Dahlman:

Dear Friends of K4D:

After nearly 26 years at the Bank, I opted for early retirement and accepted a full time teaching position at the School of Foreign Service at Georgetown University. I am very proud of the work I was able to do with the K4D team at the World Bank Institute over the past six years. It has been the most fun and rewarding experience in my long Bank career. I think that that what we

developed with this program is helping raise awareness among all countries about the role of knowledge in economic and social development, and how critical it is to address knowledge explicitly in country development strategies. I am also proud of the K4D team and am very confident that they will not only continue what we started, but build and expand on it to provide even more value added to our clients. Given that I am right here in Washington DC, I will also continue to be involved with the team, the program, and the K4D network. From my new position I will conduct research as well as teach and give policy advice on many of the same issues. My new coordinates are:

Carl J. Dahlman  
Luce Professor of International Affairs and  
Information Age Technologies  
305m Inter Cultural Center  
Georgetown University  
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## **50th Anniversary of the World Bank Institute**

WBI celebrated its 50th anniversary on March 10, 2005 and held a reception that brought together current and former staff whose experience in Economic Development Institute-World Bank Institute spanned nearly its entire 50-year history. At this event, WBI's programs were showcased, including the K4D program and its achievements to date. World Bank President Wolfensohn also highlighted the K4D program as a flagship program of WBI. In addition, Carl Dahlman appeared in a video to commemorate WBI's 50th anniversary. For more information, please visit the [50th anniversary page](#) on the WBI website.

*For more information, contact Anuja Utz.*

## **Knowledge Economy Assessments**

The key goal of these assessments is to help countries identify their strengths and weakness and to develop strategies for their transition to a Knowledge Economy. The Program provides three levels of KE assessments: Benchmarking (Basic), Enhanced (Intermediate) and Comprehensive Assessments.

### **Comprehensive Assessment**

#### **Mexico Knowledge Economy Report**

Carl Dahlman and Yevgeny Kuznetsov visited Mexico on January 17-18, 2005 to discuss the Mexico Knowledge Economy report with the government. The discussion took place at a high-level meeting chaired by the Mexican President's chief economic advisor Dr. Eduardo Sojo Garza-Aldape. The report was very well received with the government endorsing both the thrust of the report and its specific recommendations. The report is now being prepared for publication.

*For more information, contact Yevgeny Kuznetsov.*

### **Benchmarking Assessment**

#### **A Knowledge Economy Perspective on Laos: A Comparative Diagnostic**

At the request of the WBI Regional Capacity Enhancement Team, Derek Chen completed a Benchmarking Assessment for Laos in February 2005. Since 1995, Laos made some improvement in its economic and institutional regime, and the education and innovation pillars. But the country has not made sufficient progress in its information infrastructure, and thus fell in its global ranking in ICT. Overall, Laos should strive to make larger improvements in terms of the Knowledge Economy in order to maintain its high rate of economic growth of the past decade.

*For more information, contact Derek Chen and Anuja Utz.*

## Knowledge Products and Tools

### A Model on Knowledge and Endogenous Growth

This paper, jointly written by Derek Chen (K4D) and Hiau Looi Kee (World Bank International Trade Research Group), presents an endogenous growth model in which the main engine of economic development is knowledge. Using a two-sector closed economy model that comprises a conventional goods-producing sector and a research and development sector, the model incorporates two key aspects of knowledge: technology and human capital. Steady-state equilibrium conditions show that the growth rate of per capita income hinges on the growth rate of human capital. While the growth rate of human capital has been previously shown to affect the growth of the economy in transition between steady states or balanced growth paths, this paper is the first to link the growth rate of human capital to the steady-state growth rate of productivity and output per worker. Furthermore, this result does not exhibit scale effects or policy invariance, both of which have been longstanding concerns with the predictions of endogenous growth models developed in the 1990s.

The paper has been published as a World Bank [Policy Research Working Paper No. 3539](#) in March 2005.

*For more information, contact Derek Chen.*

### Promoting Innovation in Developing Countries: A Conceptual Framework

This policy study, authored by Jean-Eric Aubert, introduces a conceptual approach to innovation. This entails a gradual promotion of innovation, building upon resources and capabilities in countries, while considering their level of development and other country-specific characteristics, such as levels of governance.

The study describes innovation climates in developing countries and the various ways to conceive national strategies that depend on the countries' technical and institutional capabilities. It presents policy instruments that are required to

support efficient innovative projects, taking into account the differentiated capabilities of enterprises, including those with very low technical and managerial capabilities. A key idea is to embed the promotion of innovation into an overall process of enterprise upgrading. Issues related globalization, such as foreign direct investment, research concentration in the North, patent asymmetry and brain drain are also discussed, along with possible policy responses by developing countries.

The paper has been published as a World Bank Policy Research Working Paper No. 3554 in March 2005 and will be discussed in the K4D course on **Innovation and Economic Growth** (see *Forthcoming Events*).

*For more information, contact Jean-Eric Aubert.*

### Knowledge Economy Community on the Development Gateway

<http://www.developmentgateway.org/knowledge>.

The K4D program has been partnering with the Development Gateway on the Knowledge Economy community. This community currently has some 8,600 members from all over the world, including policymakers, private sector representatives, education/think tank/researchers, NGOs, consultants, and the media. The members are drawn from North America (22%), mainly the US, South Asia (18%), mainly India, followed by the Europe and Central Asia (18%), Latin America and the Caribbean (14%), Sub-Saharan Africa and the East Asia and Pacific regions--both at 13%, and the Middle East and North Africa regions at 4%.

This website is unique as it highlights in one place, new and emerging trends in the global knowledge economy, the initiatives that developing and emerging economies are putting in place to harness knowledge for development for growth and competitiveness, and lessons from implementations in countries around the world. Each month the Knowledge Economy topic page highlights an issue that is important to this debate.

The KE on the Development Gateway invites you to share your own experiences with

others by sharing web-sites or resources that you think are particularly valuable and participating in constructive, open debate on issues concerning the knowledge economy from a development perspective. As more than 8000 members receive e-mail alerts when content is added to the site, this is a great way to disseminate your own thoughts and information on the subject. For more information, please visit:

<http://www.developmentgateway.org/knowledge>.

*For more information, contact Anuja Utz Ellen Olafsen at the Development Gateway at [eolafsen@worldbank.org](mailto:eolafsen@worldbank.org).*

## **Learning and Knowledge Exchange Events**

### **Slovakia Competitiveness Conference**

Bratislava, Slovakia  
January 20, 2005

A national conference was organized in Bratislava to present and discuss the government's proposed strategy for developing Slovakia's competitiveness within a medium and long term perspective. The conference was the culminating event of a series of workshops, assessments, consultations and World Bank missions that began in 2003, with which K4D was very much involved. Also, the strategy proposed by the government was largely inspired by the K4D knowledge economy approach.

The conference was attended by about 130 participants, with large representation from the Slovak political and business communities. Representing the World Bank were Roger Grawe (Country Director), Jean-Eric Aubert (K4D), Itzhak Goldberg (Private Sector Development, Europe and Central Asia) and Bruno Lanvin (Global ICT Department). There were technical panels, chaired by government and parliament members, which included representatives from the private sector, academia and civil society, who provided their views on issues being discussed. The persistence of problems in Slovakia's business environment, including corruption and

insufficient law enforcement, despite very significant recent progress, was acknowledged.

One of the highlights of the conference was the large consensus from the political parties and their leaders on the proposed strategy. This augurs very well for the future implementation of the strategy. Also, it was widely recognized that there was still significant work to be done in a number of areas, such as the completion of education reforms, restructuring of the R&D system, and the development of an efficient information society. Two technical assistance projects deriving directly from the exercise are being developed: one dealing with the establishment of e-government strategies and the other with the R&D and innovation policy measures.

*For more information, contact Jean-Eric Aubert.*

### **Industrial Policy Taskforce Policy Dialogue**

Rio de Janeiro, Brazil  
March 17-20, 2005

Yevgeny Kuznetsov participated in a UNDP funded policy dialogue with the Industrial Policy Taskforce, which has been set up by Joseph Stiglitz. The objective of the meeting was to develop a realistic and pragmatic agenda of industrial policy, taking into account both past mistakes and many existing challenges. The meeting was small, with only approximately 15 participants, but included key experts such as Richard Nelson, S. Winter, L. Soete, and Alice Amsden, and represented a cutting edge of thinking in the area.

*For more information, contact Yevgeny Kuznetsov.*

## Forthcoming Events

### **Videoconference Seminar on Indigenous Knowledge**

April 6-7, 2005

9:00 am - 12:00 noon (Washington time)

Sites: Paris, Washington, Pretoria, Dar es Salaam

The objective of this two-day videoconference-based seminar, delivered out of Paris, is to stimulate a discussion on issues relating to the role of indigenous knowledge (IK) in economic and social development. The other sites involved will be Washington DC, Pretoria (South Africa) and Dar es Salaam (Tanzania). The seminar is being organized in cooperation with an academic partner in South Africa. The World Bank's IK team at HQ is also involved. Speakers will include academics, traditional IK practitioners, and World Bank staff in South Africa, Tanzania, Washington and Paris. For more details, please refer to the World Bank Learning Catalog using the links provided.

*For Bank staff, please register through the Learning Catalog:*

[Paris](#), [Washington](#), [Pretoria](#), [Dar es Salaam](#).

*For non-Bank staff, please register through the External Learning Catalog:*

[Paris](#), [Washington](#), [Pretoria](#), [Dar es Salaam](#).

*For more information, contact Aisling Quirke.*

### **Innovation and Economic Growth**

Tuesday, April 26, 2005

9:30 am – 12:30 pm

World Bank Main Complex MC6-W150

This course, taking place during the World Bank PREM Learning Week, focuses on the importance of innovation to long-term economic development and how government policies can be used to cultivate an environment conducive for innovation and technological adoption to take place.

The K4D innovation conceptual framework described under *Knowledge Products and Tools* will be presented during the first part of the course. The second part of the course is a synthesis presentation of the important policy lessons emerging from the recently completed

study on "The 'How To' of Technological Change for Faster Economic Growth". This study examined 10 successful experiences from various sectors and across countries to understand exactly how and why the sector grew so rapidly. In each case, technology played a key role and productive public-private partnerships were usually the drivers in facilitating of public policies shaping private sector development in ways that led to the adaptation/adoption of superior technologies of production. These technologies in turn, raised productivity and attracted investment for faster growth and exports. A strategy of export orientation was employed by governments to reign in the discipline of the marketplace by motivating firms to continually upgrade their global competitiveness to maintain the ability to export. All the 10 sectors studied experienced rapid but sustained economic growth, and frequently achieved a visible share of the global export market.

*For Bank staff, click [here](#) to register.*

*For non-Bank staff, click [here](#) to register.*

*For more information, contact Derek Chen.*

### **Knowledge-Based Growth and Competitiveness**

Tuesday, April 26, 2005

2:30 pm – 5:30 pm

World Bank Main Complex MC6-W150

This course focuses on the contribution of knowledge to economic development and competitiveness. In particular, it will dwell on the importance of education, innovation and technological adoption, ICT infrastructure, and the economic and institutional regime, and their interdependence, for sustained economic growth. It will include a discussion of an empirical study on the effects of knowledge on economic growth, followed by a series of presentations on recent country-specific assessments in which countries' strengths and weaknesses in the use and creation of knowledge are identified, and the associated policy recommendations. Country assessments will include those on India, China, and South Korea.

*For Bank staff, click [here](#) to register.*

*For non-Bank staff, click [here](#) to register.*

*For more information, contact Derek Chen.*

### **Global Workshop on Migration of Talent and Diasporas of the Highly Skilled**

Buenos Aires, Argentina  
April 26-27, 2005

This two-day workshop is being organized by K4D in conjunction with the World Bank Latin America Region, and focuses on the design of public policies to leverage expatriate skills abroad for the benefit of the countries of origin. A distinctive focus is on facilitation of “brain circulation” rather than trying to reverse “brain drain”.

The workshop targets practitioners, and will discuss lessons of Diaspora initiatives, both successful and failed in a variety of countries: India, Colombia, South Africa, Scotland, and focus more closely on design and future directions of on-going Diaspora initiatives (‘networks of talent’) in Argentina, Chile and Mexico and other Latin American economies. In particular, three types of Diaspora networks will be highlighted: scientists and R&D personnel; business networks of innovative start-ups, and networks of professionals working for multinationals.

*For Bank staff, click [here](#) to register.  
For non-Bank staff, click [here](#) to register.  
For more information, contact Yevgeny Kuznetsov.*

### **Seminar on Competitiveness, Knowledge Economy and the Business Environment in Maghreb Countries**

Tunis, Tunisia  
May 2-5, 2005

This high level seminar, jointly organized by the Joint Africa Institute and the World Bank office in Tunis, is designed to help key policy makers to elaborate and implement appropriate policies to boost competitiveness, in a world in which knowledge and innovation play a major role for economic development. The seminar will show how the “knowledge economy” approach applies to countries to all income levels, and illustrate the concept with concrete examples from Maghreb countries and grounded in specific policy actions related to the business and

innovation environment, and education and training programs in these countries. A large part of the seminar will be devoted to exchange of knowledge and experience among participants.

About 50 high level participants from government, business and academic circles are expected to attend from Algeria, Mauritania, Morocco and Tunisia.

*For Bank staff, click [here](#) to register.  
For non-Bank staff, click [here](#) to register.  
For more information, contact Jean-Eric Aubert.*

### **Technology Innovation and Economic Growth**

May 26-27, 2005

Zhejiang University

Hangzhou, Zhejiang Province, China

This workshop aims to share with Chinese government officials the policy experiences of other countries, especially that of South Korea, in strengthening technology capacity and competitiveness at both industry and firm levels, and in improving the R&D efficiency. Issues related to the promotion of regional development through technology and innovation will also be explored. Participants at this workshop will be drawn mainly from China, South Korea and selected OECD countries, and will include policymakers, industrial and technology experts from the private sector, state owned enterprises, public research institutes, academia, the OECD and the World Bank.

This workshop will be simultaneously delivered in English and Mandarin.

*For Bank staff, click [here](#) to register.  
For non-Bank staff, click [here](#) to register.  
For more information, contact Douglas Zeng.*

**Intellectual Capital for Communities Nations, Regions and Cities**

Paris, France  
June 20, 2005

This is the first worldwide event specifically dedicated to addressing concepts and ideas related to intellectual capital of “Natural Communities”. The main objective of the conference is to raise awareness of issues regarding intellectual capital, and is thus an important initiative for starting a dynamic process for thinking about and prototyping intellectual capital for communities.

Main issues to be discussed at this conference will include:

- How to visualize the knowledge capital of nations;
- How to develop intelligence flows within and between knowledge capital clusters;
- How to cultivate efficiency and renewal of the knowledge capital of regions;
- How to capitalize on knowledge capital, by new innovative social systems, in terms of the collective wealth of nations;
- How to make cities “intelligent”.

*For more information, contact Jean-Eric Aubert.*

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**The K4D Team**

**Acting Program Manager**

Mr. Jean-Eric Aubert

*Lead Specialist (based in Paris)*

**Team Members:**

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*Senior Public Sector Specialist (on secondment from the Korean Ministry of Planning and Budget)*

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Mr. Douglas Zhuhua Zeng

*Economist*

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*The Knowledge for Development (K4D) Program*

*Knowledge, and its application, is now widely acknowledged to be one of the key engines of economic growth. The increasing importance of knowledge has created both opportunities and challenges for developing countries. On one hand, the knowledge revolution presents significant opportunities for promoting economic and social development, thereby reducing poverty. On the other hand, it has become more crucial than ever for countries to position themselves so as to participate effectively in the knowledge-driven markets that now dominate the global economy. Failure to do so, could result in countries being left further behind.*

*The main objective of the K4D Program is to help client countries make the transition to the Knowledge Economy, which is one that uses knowledge as the key engine for economic growth. More specifically, the Program helps countries make more effective use of knowledge for their overall economic and social development by focusing on the four ‘knowledge’ pillars: an educated and well-trained population; a dynamic innovation system; an established information and communication technologies (ICT) infrastructure; and an economic and institutional regime that is conducive to the creation and use of knowledge. The K4D Program thus works with clients to develop concrete ‘knowledge’ strategies covering the four KE pillars, taking into account issues of political economy, governance and the need to build stakeholder ownership.*

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