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Eight Proposals for a Strengthened Focus on Technical and Vocational Education and Training (TVET) in the Education for All (EFA) Agenda

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Eight Proposals for a Strengthened Focus on Technical and Vocational Education and Training (TVET) in the Education for All (EFA) Agenda¹

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Background and rationale

These eight proposals derive from several bodies of work on skills development which have been completed in the last 3 years. They seek to avoid merely summarizing this work, but to extract from it, for this discussion on skills development, some new ways of thinking about the topic, some priority areas and neglected issues, key topics, as well as data and research needs. The work reviewed includes the valuable section in GMR 2010 (pp. 76-93) on Youth and Adult Skills; Planning for Technical and Vocational Skills Development (King and Palmer, September 2010); Skills research by the Research Consortium on Educational Outcomes and Poverty (RECOUP: 2010; 2011); A Technical and Vocational Education and Training Strategy for UNESCO (UNEVOC, 2009; UNESCO, 2009); and Skills for Work, Growth and Poverty Reduction (King and Palmer, 2008).

1. Towards a conceptual clarification of skills.

Arguably one of the reasons for the lack of progress in the analysis and monitoring of Goal 3 until the GMR 2010 was the uncertainty, both nationally and internationally, about the vague scope of ‘appropriate learning and life-skills programmes’ in the original text of the Dakar World Forum (UNESCO, 2010: 75; King and Palmer, 2008; King, 2011). The GMR 2010, for the first time in the series of EFA volumes, changed all that; the focus was now much more on technical and vocational skills and skills development than on life-skills; and although UNESCO’s comparative advantage, with its links to ministries of education, is more on technical and vocational education (TVE) than on vocational training beyond the school system,² there was a good deal of recognition of different, major post-school vocational training arrangements,³ as well as of work-based training, including of such training in the massive informal apprenticeship systems of many countries. UNESCO in its new TVET policy has also supported the definitional clarification of skills, which is expected to improve TVET indicators, and to feed into the ISCED review as well as into better monitoring of Goal 3 at both the national and global levels (UNESCO, 2009: 3). [See further proposal 6 on improving the monitoring below.]

Given UNESCO’s and in particular UNESCO Institute of Statistics’ (UIS) links to national ministries of education, and therefore to conceptual clarification on what can be called the supply side of the skills development domain, it may be worth flagging up that the widespread current fascination with moving to a more demand-driven approach for TVE may raise some employer priorities such as soft and team skills that

¹ I would like to thank Robert Palmer for his detailed comments on this draft.

² For instance technical and vocational education is used no less than 128 times in the GMR 2010, and technical and vocational education and training just 9 times.

³ Many such programmes in Latin America are exemplified, including SENAI, as well as in many other countries, e.g. India

will complement best practice in school systems, whether general or technical, but these priorities could also introduce other emphases such as competency based training (CBT) which would still be at variance with much current TVE school curricular practice, and would constitute a major challenge for many ordinary instructors.⁴

2. Skills development for poverty reduction.⁵

This has become almost as much of a mantra as skills for productivity, competitiveness and growth, and it has proved difficult for policy makers and donors to deal effectively with the competing agendas of skills for poverty reduction and skills for growth. There has been insufficient attention particularly, however, to whether the poorest and most marginalized groups in society actually access formal technical and vocational education, or formal vocational training. For the poorest segments, their prior low levels and low quality of formal education negatively affect access to and acquisition of both formal and informal technical and vocational skills (RECOUP, 2010).⁶ In situations where formal TVE is increasingly located at the end of junior secondary schooling, and where gross enrolment in secondary is only 34% as in sub-Saharan Africa, and TVE is only 2%, it is highly unlikely that the young people from the poorest families are in those low percentages. Furthermore, when TVE options are offered in contexts where secondary education itself is reaching a minority of the population, there are very strong pressures for the tiny TVE segment of secondary to be influenced by the same pupil aspirations as general secondary. As the GMR 2010 concludes: ‘no national policy for developing skills is likely to succeed unless governments dramatically increase the flow of students into secondary school’ (80). In other words, there is an important education supply side dimension of skills for the poorest. As far as entry to informal apprenticeships is concerned, these are certainly more accessible to the poor than formal TVET programmes, but the poorest young people still tend to be excluded even from this modality, because of the fees, and the lack of wages in the early portions of the training.

3. Technical and vocational education and training and the enabling environment⁷

Skills acquisition is very different from skills utilization, and especially for the poorest who can only access basic education of very low quality. Even for the less poor, in many countries, the teaching and learning of basic literacy and numeracy skills in primary and junior secondary schools are of appalling quality; hence the foundation for later, more specialized vocational skills is very weak. Added to that is the fact that the provision of formal technical and vocational education is often so awful that it constitutes a disabling environment for skills acquisition. But beyond the schools, the productive use of education or of skills in the workplace depends upon

⁴ See GMR 2010: ‘Moving towards a demand-driven approach that responds to the needs of individuals, companies and the economy is the overriding priority for reform’ (91). It should also be noted that the new World Bank Benchmarking for Workforce Development (WfD) emphasizes employer-driven skills demand as one of their key performance drivers; skills supply is currently not a driver at all (Tan et al, 2010). The very term workforce development emphasizes the labour market in a way that skills development does not.

⁵ See also on skills development in relation to poverty reduction, King and Palmer, 2010: 44-52.

⁶ Recruitment into the informal apprenticeship system is also segmented in the sense that the more modern and profitable trades increasingly prefer candidates who have completed at least junior secondary education.

⁷ For education, training and their enabling environments, see Palmer et al (2007: 71-89).

there being a dynamic or enabling environment for their utilization, as the World Bank famously pointed out in 1980.⁸ Hence there is nothing automatic about the utilization of skills, whether basic literacy or more specialized vocational; they both require supportive local economic environments. And these are in turn affected by the wider international, national (economic, political, socio-cultural) environments, and especially the labour market environment. The latter might include: the growth in the economy and availability of more and better employment opportunities; the advancement, accessibility and adoption of technological capabilities; the development of an equitable infrastructure for formal and informal enterprises; the presence of meritocratic access to both the formal and informal labour markets; and the availability of financial capital.

How many countries can move from their current disabling environments for the up-take and utilization of skills to supportive local economic development contexts is far from clear or easy; but it depends on a whole set of policies far beyond the ministry of education, as the GMR 2010 affirms, and not least rapid economic growth and the ‘integration of TVE into broad-based national strategies for industrial development, employment creation and raising living standards’ (93). The creation and supply of higher levels of skill are themselves, of course, one input into this enabling environment, but just one, and by no means sufficient on their own. The analysis of these wider enabling conditions for education and skills development, and of education and TVET’s part in contributing to this environment have been detailed in Fredriksen and Tan’s useful reflection on Africa learning from Asia (2008).

4. Training in the informal or unorganized sector.

The supply of training outside the formal economy is widely acknowledged to be the main pathway for skills acquisition and utilization in many countries. And what has been said above about the enabling economic environment applies directly to this sector. Policy makers are now much more aware of the scale of such training, as compared to formal TVE or TVET, and they are attracted by the sheer size of the youth population that is involved in acquiring skills in this part of the private sector. Schemes to formalize what may be called the training side of the informal sector abound, including of the informal apprenticeship system. These can involve upgrading masters, organizing access to theory related to the practical skills being acquired, promoting certification of informally acquired skills, even the proposed funding of the apprentices’ first year.⁹ But as Johanson, with experience of both African and Asian skills settings argues, most success in training for the informal sector does not relate to the training itself but to pre- and post-training activities, such as rigorous market analysis beforehand and credit, marketing, and business advice after training (Johanson, 2009: 53).¹⁰

⁸ In one of the most frequently misquoted research finding in education – four years of education makes a difference to farmer productivity – Lockheed, Jamison and Lau (1980) had actually argued that this only makes a difference in dynamic surrounding environments; almost not at all otherwise.

⁹ For example, in Ghana even though the current plan is to offer just 5,000 of the estimated 440,000 apprentices a free first year, and target the poorer junior secondary graduates, it could still have a distorting effect on the private financing of this huge system, and with the end of funding after one year of the full 4-5, there could be substantial numbers of drop-outs (Palmer to King, 20.10.10).

¹⁰ In most cases, there are very weak linkages between informal apprenticeship graduates and any type of formal business or credit support. Most graduates have to rely on their own financial resources and networks to make the transition between skill acquisition and skill utilization.

5. School-based technical and vocational education

This remains an area of very considerable diversity in different regions, reflecting very different histories and international influences. First of all, the coverage is dramatically different, as the GMR 2010 (p.80) makes only too clear. South Asia, Sub-Saharan Africa and Caribbean (all areas influenced, in large parts, historically by the UK) register very low TVE coverage of total secondary enrolment. Thus, South and West Asia, Sub-Saharan Africa, and the Caribbean register 1%, 2% and 2% respectively. On the other hand, East Asia, Latin America and Central Asia total 11%, 10% and 11% respectively. Given that vocational specialization at the secondary stage is increasingly deferred to the upper secondary stage, these sets of figures point to a much lower enrolment than may actually be the case at upper secondary. (See further point 6 below.)¹¹ Thus China had no less than 43% of its upper secondary school students in vocational schools in 2007, to take just one example (Kuczera and Field, 2010: 13).

The other aspect of TVE diversity is curriculum delivery rather. A large number of countries, from Latin America, to Europe, to South East and East Asia offer TVE in quite separate schools from general secondary. It would be valuable to know the total number of such separate systems world-wide, but they can be found from China to Brazil, and from Argentina to Indonesia.¹² There are of course crucially important issues about the degree of overlap between such technical and vocational schools and their academic counterparts, the processes of selection into them, and the pathways out of, and beyond them. Status issues continue to be present for these separate systems, even where, as in China, there are major investments in very high quality key vocational secondary schools. Therefore, although their separate status may appear ‘outmoded’ to the GMR 2010 (92), and is given little, but critical attention in the ADB’s *Good practice in technical and vocational education and training* (Johanson, 2010),¹³ in total this modality is still massive across the world, and encompasses many different cultures and traditions. Its curricula and coverage need to be better understood (See further proposal 6 below.), as illustrated by the very valuable review of *Learning for jobs. OECD reviews of vocational education and training. Initial report* (Field, et. al. 2009). This review of course covers both the separate vocational education systems, like China, and those, like Sweden, in which vocational education streams are a major part of its upper secondary school system. But its importance is to illustrate, for example, that there are no less than 13 different branches of vocational education within Sweden’s upper secondary schools (covering half of all the students) and also 13 different branches of vocational specialization in China, but in separate vocational schools (Kuczera et al. 2008; 2010).

6. Improving the monitoring of low-hanging fruits in relation to TVE, and noting the higher- hanging fruits in vocational training and in the informal sector.

¹¹ Briasco (2010: 47) claims that the proportion of students attending technical secondary in Latin America and the Caribbean comes to approximately 30% of students in the region.

¹² The GMR 2010 notes under ‘school-based systems’ [of technical and vocational education] that Japan has vocational secondary schools but other examples are not mentioned (GMR, 2010: 77). However, in Briasco (2010: 47) it is plain that the majority of countries in Latin America and the Caribbean have separate technical secondary schools.

¹³ ‘Public training provision [of TVE and TVET] often tends to be weak, irrelevant, ineffective, and inefficient’ (Johanson, 2010: 32).

TVET information systems, including monitoring and evaluation of TVET supply, demand and financing are often woefully inadequate in most developing countries (King and Palmer, 2008). There are two main biases here: first a bias toward the monitoring of school-based TVE, rather than formal or informal vocational training, including apprenticeships; and second a bias toward the easier-to-collect supply side data. In the short term, supply side data on school- and college-based TVE as reported in the GMRs could certainly be improved. For example: i) The GMR data on TVE refers to enrolment in TVE at the secondary level, but we can't tell from this what proportion of TVE is taking place at the lower- and upper-secondary levels; ii) It would also be useful to disaggregate other dimensions of school-based TVE, for example providing data on separate TVE schools compared to TVE streams within a more general curriculum; iii) At the tertiary level, the GMRs contain no information on post-secondary technical colleges or polytechnics, but only information on students' field of study (e.g. 'engineering, manufacturing and construction' and 'agriculture'). Such are examples of the low-hanging fruits that monitoring of TVE within the formal education system could achieve.

But there is a great need also to think outside of the Ministries of Education, and to think beyond supply side data on TVE. It would be useful to better compile and analyse what existing data sources countries have related to TVET, but it may only be possible to provide illustrative regional snapshots – as indeed the GMR 2010 started to do. Public budgets for TVET outside of Ministries of Education (MOE) could also be collected, as could supply side data on enrolments in formal vocational training (outside MOE). Labour and household surveys in some countries can provide data on TVET, formal and informal – including informal apprenticeships. There are several existing data sets that could be tapped into to get a better sense of the demand side of TVET. For example, the social demand for TVET from basic education graduates and their parents can be assessed by looking at enrolment in different types of TVET programmes, how these have changed over time, and what future school enrolment projections might indicate about future social demand for TVET. Similarly, inferences on the economic demand for TVET could be drawn from firm-level surveys such as the World Bank's Enterprise Surveys.¹⁴ There needs to be a firm emphasis, therefore, on the strengthening of national level TVE and TVET information systems. Without such national level data, comparable data at international levels and global monitoring will remain out of reach. Work on TVET data beyond the school system will be more demanding, but given the massive size of the non-school TVET systems in many developing countries, it will be invaluable for the GMR 2012 to be able to point to the implication of these for the planning and expansion of any school-based TVE.

7. Financing TVE and TVET

Globally, the drive to mobilize finance for TVET is much weaker than efforts to raise resources for academic schooling or higher education; there is no Fast Track Initiative for TVET. There are some obvious reasons for this including the neglect (and conceptual confusion) of EFA Goal 3, the perceived difficulty of engaging in this area, and frustration with earlier attempts to finance TVET. Paradoxically, TVET has risen much higher up the agendas of both developing country and donor governments

¹⁴ These have data from about 50 countries around the world, and include questions to firms about the extent to which labor skill level is a constraint.

– but this is yet to really transform into noticeable shifts in funding. With the current pressure on both donor and developing country budgets, new ways are needed to mobilize financing for TVET; in this regard it might be useful to explore what international and domestic innovative financing mechanisms might be suited to TVET.¹⁵

Developing country governments usually treat the financing of public TVET as they do academic schooling and an input-driven approach is used; institutions often receive budgetary allocations (based on some input-oriented funding formula related to number of instructors, number of trainees, previous year's budget etc) that remain the same whether the institution is performing well or not. Financing is not linked to efficiency, attainment of minimum training standards, outputs, or outcomes. A culture of apathy exists in many cases since there are no incentives, or disincentives, for performing well or badly. Data on financing for TVET follows the two main biases noted above; the bias towards Ministry of Education data, and the bias towards supply side data. Public expenditure on TVET should not only include data from Ministries of Education, but also aggregate data from other public ministries responsible for TVET (e.g. Ministries of Labour). Attempts should be made to estimate the private financing that goes into TVET (both private formal providers, and enterprise-based training, formal and informal).

8. Identifying the situation of the poorest young people in the global politics of skill development

But the GMR 2012 will probably not just be concerned with the better monitoring of the numbers, large and small, of those who are in school-based systems of technical and vocational education, whether integrated or separate. Nor will it just be about greater clarity in the meanings, financing and reforms of skills development in formal and informal settings, both public and private. The GMR has secured a well-justified reputation for itself in going beyond these basic dimensions, important though they are, and pointing up the implications of key trends, such as governance, and of new instruments such as the deprivation and marginalization index (DMI) for the poorest and most marginalized sections of society.¹⁶

In the global politics of skills development, there should be plenty room for this. In many countries, including most of South Asia, the reason that there are so few young people in school-based TVE or TVET institutions outside the school, is that the main system for securing skills is through taking on young people as casual labour, and gradually selecting from these, after periods of low or no wage, those who can work with the *mistris*, or masters, formed by the same system. This has been known for a long time, and has been referred to in the *South Asia Human Development Report of 1998*, as well as in Breman and King (Breman, 1996; ul Haq and Haq, 1998; King, 2007). This is most certainly a 'demand-led system', but one that is very different from the traditions of the informal apprenticeship of master and learner (*ustad – shagird*). In other words, behind the figures of 80 to 90% of new jobs being in the

¹⁵ See Bermingham, 2010 (NORRAG News 44) on Innovative financing for education

¹⁶ The DMI, developed for GMR 2010, could usefully be extended to TVET – so that we can say what % of the poor are accessing TVE, in the first instance, and later TVET.

informal, unorganized sector of the economy, there may be several skill development systems operating, including the massive system of skills-via-casual-labour.

Several of the countries of South Asia currently have the largest plans in their history for the expansion of their skilled labour force,¹⁷ including profiting from what India terms the ‘demographic dividend’ of having much larger numbers of young people (admittedly still unskilled) than China, or other Western or Eastern countries. Bangladesh, Pakistan and India all also intend to profit, through remittances, from the planned expansion of millions of migrant labourers. Currently, half of such migrant labour is unskilled, in the case of Bangladesh, and it is expected that with pre-migration up-skilling, the return will be much greater.

These traditions of millions of young people seeking to acquire skills through casual labour, and through internal and international migration are not only applicable to South Asia, but are also present in Latin America, as can be seen from accounts of the informal, casual work available to youth with the lowest levels of education in that region (Jacinto, 2010: 39). With such young people in mind, it will be important to get behind the rhetoric of skills for poverty reduction and growth, and of more demand-led approaches, to recognize how particular cultures and traditions of work are already deeply affecting the poorest and most vulnerable young people.

The GMR team has already noted that it will need, to a greater extent than earlier GMRs, a ‘genuinely global framework’. The factors just mentioned are only two of a whole series of such dimensions which will provide challenges in framing ‘policy responses capable of reaching highly vulnerable populations working in the informal sector, or in rural areas’ (GMR, draft note on the 2012 Report).

References

Bermingham, D., 2010. Innovative financing for education. In NORRAG News 44, Special Issue on New Actors in Development. Downloadable at www.norrag.org

Briascio, I., 2010. Trends in technical and vocational education and training in Latin America, in: Jacinto, C. (Ed), 2010. Recent trends in technical education in Latin America. IIEP, Paris.

Field, S., Hoeckel, K., Kis, V. and Kuczera, M., 2009. Learning for jobs. OECD reviews of vocational education and training. Initial report. OECD, Paris.

Fredriksen, B. and Tan, J., 2008. East Asia education study tour: an overview of key insights, in Fredriksen, B. and Tan, J. (Eds) An African exploration of the East Asian education experience. World Bank, Washington.

¹⁷ India’s Skills Mission intends to increase the proportion of formally and informally skilled workers from a mere 2% currently to 50% by 2022, making a 500m strong labour force (GoI, 2007).

Government of India (GoI), 2007. Report of the Task Force on Skill Development, Planning Commission, New Delhi, available at http://planningcommission.gov.in/aboutus/taskforce/tf_skilldev.pdf

Jacinto, C., 2010. The background of the relations between general secondary and technical education and employment in Latin America: eight points. In Jacinto, C. (ed) 2010. Recent trends in technical education in Latin America. IIEP, Paris.

Johanson, R., 2009. Good practice in technical and vocational education and training. Asian Development Bank, Manila.

King, K., 2007. The politics of skill: China, Africa, India. Comparative Education Society of Asia (CESA) and Comparative Education Society of Hong Kong (CESHK) Conference, 8-11 January, 2007, Hong Kong, downloadable from <http://www.hku.hk/cerc/KK-Article.htm>

King, K., 2011. Skills and education for all from Jomtien till the GMR of 2012: A policy history. International Journal of Training Research, 9: 16-34.

King, K. and Palmer, R., 2008. Skill for work, growth and poverty reduction. Challenges and opportunities in the global analysis and monitoring of skills. British Council and UK National Commission for UNESCO, London. Downloadable at: www.unesco.org.uk/uploads/SkillsforWorkGrowthandPovertyReduction-Sept08.pdf

King, K. and Palmer, R., 2010. Planning for Technical and Vocational Skills Development. Fundamentals of Educational Planning No.94, IIEP, Paris. Downloadable at www.iiep.unesco.org

Kuczera, M., Field, S., Hoffman, N., and Wolter, S., 2008. Learning for jobs. OECD reviews of vocational education and training. Sweden. OECD, Paris.

Kuczera, M. and Field, S., 2010. Learning for jobs. OECD reviews of vocational education and training. Options for China. OECD, Paris.

Lockheed, M., Jamison, D. and Lau, L., 1980. Farmer Education and Farm Efficiency: A Survey. In King, T. (Ed.) Education and Income. World Bank Staff Working Paper No.402, World Bank: Washington.

Palmer, R., Wedgwood, R., Hayman, R., with King, K. and Thin, N., 2007. Educating out of poverty? A synthesis report on Ghana, India, Kenya, Rwanda, Tanzania, and South Africa. Researching the Issues, No. 70, DFID, London.

RECOUP – Research Consortium on Educational Outcomes and Poverty, 2010. Technical and vocational skills acquisition and its impact upon the lives and livelihoods of poor youth in Ghana, India and Pakistan. RECOUP case study, Cambridge.

RECOUP, 2011. Palmer, R., Akabzaa, R., Janjua, S., King, K. and Noronha, C. (2011, forthcoming) Skill Acquisition and its Impact upon Lives and Livelihoods in Ghana, India, and Pakistan, in Colclough, C. (Ed) (2011, forthcoming) Education and

Poverty in the South: Vol. 3 – Reassessing Education Outcomes, Education, Poverty and International Development Series, Routledge, London.

Tan, J., McGough, R. and Valerio, A., 2010. Workforce development in developing countries: a framework for benchmarking. Human Development Network, World Bank, Washington

Ul-Haq, M. and Haq, K. [eds.], 1998. Human Development Report in South Asia 1998. Human Development Centre, Islamabad/ Oxford University Press, Karachi.

UNEVOC, UNESCO, 2009. International expert consultation meeting on technical and vocational education, 12-13 January 2009. See paper by King, K., A Technical and Vocational Education and Training Strategy for UNESCO, downloadable at: www.unevoc.unesco.org/article/International+Expert+Consultation+Meeting+on+Technical+and+Vocational+Education.html

UNESCO, 2009. Progress on the implementation of the strategy for technical and vocational education and training (TVET) and the revised version of the strategy. Executive Board 182nd Session, 182 EX/INF.5. Paris 3 August 2009, UNESCO Paris.

UNESCO, 2010. Education for All Global Monitoring Report 2010. Reaching the marginalized. EFA GMR, at UNESCO, Paris