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Open/Distance Learning and the Changing Labour Market: Toward a Framework for Rethinking Educational Governance Structures

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ABSTRACT

The progressive liberalisation of the Philippine economy has produced a domestic labour market characterised by increasing contractualisation and diminished security of tenure. Re-training and continuing education have been suggested as the basis for a viable safety net system. We argue that while distance learning holds promise as a means of maintaining Filipino competitiveness, its administration must be rationalised and implemented within the context of more wide-ranging reforms within the education sector. In addition, open and distance learning may, in fact, facilitate the reform process itself, particularly in the areas of improving teaching competence, increasing the preparedness of students for higher education, establishing a more uniform accreditation system, as well as updating and harmonising standards for professional services.

Executive Summary

The potential that Open/Distance Learning holds for helping to increase the competitiveness of Filipino labour is premised upon its ability to keep labour skilled and therefore more mobile. Given that the country has latched its hopes to often volatile international markets as well as the fact that the mass production of low-value-added goods is no longer a viable development strategy, greater pressure is put upon the local labour market to upgrade general skill levels.

Open/Distance Learning in the Philippines is closely linked to the development of non-formal education. A number of civil society groups and international agencies have had success in implementing ODL-based programmes. They operate, however, independently of each other, for the most part. We argue, in this paper, that ODL can effectively address a number of structural concerns brought up in the Report of the Presidential Commission on Education Reform.

The oft-cited mismatches in the Philippine educational sector still exist. On the demand side, the inability of labourers to move to knowledge-based "sunrise" industries where the Philippines purportedly has a comparative advantage (software development, biotechnology) is seen as evidence of low labour mobility and exposes the need to embrace a lifelong learning and continuing education philosophy. Emerging "flexible labour arrangements" (contractualisation, home-based quota production, etc) keep workers in declining industries, often at the expense of quality of life issues (working conditions, security of tenure, etc). On the supply side, the higher education sector still fails to produce graduates with (a) adequate skills and (b) degrees that complement national development objectives because of historical and persistent market failures such as the well-known "fetish for diplomas".

The market for ODL services is concentrated upon 2 public and 6 private providers. The cost of an ODL programme is quite competitive and this is borne out by the high growth rates experienced by the few private providers that operate. Print-based ODL modules are extremely cheap to produce (P250/module) compared to broadcast or internet-based ones.

Education planners clearly have much to learn from the experiences of developing countries like China, Brazil, India, and many others that have used print and radio-based ODL programmes to target the most marginalised sectors of their rapidly growing populations – rural children, single mothers, the unemployable, etc. With judicious funding, cost-effective programmes have made it possible to overcome geographic boundaries and daunting obstacles to formal education. Many of these programmes carry content that is often more practical than that offered by the formal sector – nutrition and sanitation, family planning, entrepreneurial skills, etc.

In the Philippines, ODL services are most pervasive at the graduate level; the use of ODL in the basic and tech-voc sub-sectors is substantially underdeveloped, although this is probably a reflection of the general state of vocational training in the country. CHED's Memorandum No 27 (1995) sets guidelines for ODL provision based on an HEI's accreditation level, to ensure quality control.

The chances for success in implementing a nationwide ODL-based learning/re-training environment are contingent upon the following general reforms in the education sector:

(1) greater coordination among the "trifocalised" agencies   DECS, CHED and TESDA;

(2) rationalisation of the education sector (including the removal of asymmetries in the legislative process, such as the dependence of CHED planning upon congressional approval) and the formulation of a specific national education agenda;

(3) improvement of teacher welfare.

Once these have been achieved, ODL will then be able to contribute to each of the education subsectors.

In basic education:

(a) by enabling marginalised and vulnerable sectors greater access to both formal and non-formal education, especially given the experiences of a number of developing countries in this area; and

(b) by facilitating language acquisition among those outside the linguistic mainstream.

In higher education:

(a) by providing an effective means of improving teacher competence, again, in the light of successful programmes elsewhere;

(b) by representing a reasonable compromise on the expert-recommended but politically-unacceptable "pre-bac year" proposal;

(c) by serving as means to improve the quality of professional review services;

(d) by increasing the scope of Centres of Excellence and Centres of Development in graduate training; and

(e) by providing government with a powerful means of phasing out inefficient HEIs.

In technical-vocational education:

(a) by helping address problems of "outdated" knowledge in vocational training;

(b) by providing a rationale for co-opting foreign providers of ODL and training; and

(c) by improving the "image" of tech-voc education, given distorted public perceptions.

An effective national ODL apparatus, however, would require the following:

(1) a "superbody" to manage ODL programmes across the three education sub-sectors;

(2) the development and institutionalisation of "best-practices" and standards among providers as well as the establishment of a database for tracer studies on completion rates, labour market absorption, etc;

(3) some legislative fine-tuning, particularly on the issue of foreign provision; and

(4) a more rational means of targeting recipients – particularly workers who are already employed and need skills upgrading, as well as students preparing to enter university.

INTRODUCTION AND PLAN OF THE PAPER

WHAT CHANGES IN *the governance structure of our higher education system must be introduced in order to improve the efficiency of open/distance learning as a means of helping the Filipino labour force cope with a rapidly changing labour market?* The scope of the paper is unusually broad and developing the central argument requires four stops *en route*: in **Part I**, we outline the pedagogical and economic basis for open and distance learning. We also provide a theoretical framework for understanding the role continuing education plays in the maintenance of an internationally competitive labour force.

In **Part II**, we carry out a more detailed demand and supply-side analysis of the Philippine labour and education markets. On the demand side, we investigate the important characteristics of a domestic labour market that has been subjected to a 15-year programme of increasing liberalisation. Our aim is to identify the emerging trends brought about by the progressive opening up of the economy as a result of the country's commitments to the WTO in general and the services sector under the GATS in particular. On the supply side, we examine the educational sector and describe the process by which graduates are selected and trained for entry into the labour force. We discuss the inefficiencies of the higher education sector and analyse the mismatches that persist between the needs of a rapidly-liberalising economy and the supply of labour it produces.

In **Part III**, we argue that the present state of distance learning in the Philippines is reflective of the problems of a generally "unplanned" higher education sector needing reforms at several levels. We demonstrate that ODL has great potential as a means of addressing important equity and efficiency issues in the education sector, but in order for it to maximise its social rate of return, it must be rationalised – that is to say, its clients must be better-targeted, and its programmes must be channeled toward achieving specific reforms in the education sector such as teacher training and the harmonisation of professional standards. We then consolidate our arguments in the light of the developments in the national higher education system. We outline a policy framework

that complements the more general proposals for reform that have existed since the **1998 Philippine Education Sector Study**.

PART I: OPEN AND DISTANCE LEARNING (ODL) AND INTERNATIONAL COMPETITIVENESS: A THEORETICAL FRAMEWORK

This section establishes the case for using distance learning as a means of increasing the mobility of Filipino workers in a rapidly-changing labour market by encouraging lifelong learning and the continuous acquisition of skills. As such, we concentrate upon its ability to (a) increase the chances of entry-level employment for those previously unemployable; and (b) decrease the time and cost of shifting between jobs, particularly those lost as a result of liberalisation.

But first, a few definitions are in order:

FORMAL VERSUS NON-FORMAL EDUCATION. The Philippine educational system is composed of two major sub-systems, the formal and non-formal. The former consists of sequential academic schooling at several levels. Included are six years of elementary education, four years of secondary education, and a variety of post-secondary programmes. The post-secondary levels include one to three years of technical/vocational education or a minimum of four years tertiary education. The completion of each level is a pre-requisite for entry into the next, with the emphasis upon scholastic competence.

Non-formal education, on the other hand, may be described as any organised and systematic learning conducted largely outside the formal educational subsystem that may or may not provide certification[2]. It is different in two important ways: first, in that it addresses the needs of those unable to participate in the formal subsystem, although its

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[2] Ma Celeste T Gonzales & Ma Concepcion V Pijano. "Non-Formal Education in the Philippines: A Fundamental Step Toward Lifelong Learning". APEC-HURDIT. June 1998.

ideas to be carried out much more extensively. Microcomputing has now been around for three decades, making possible computer simulation, intelligent tutorials, and other forms of individualised learner-centered education – all using alternative delivery systems.

The added factor today, of course, is the hyperbolic growth of the Internet, which has energised a new vision of how to deliver learner-centred education. Online education makes possible remote access to enormous databases and textbases, remote collaboration, linkage of a critical mass of learners for specialised topics, interactive conferencing and even videoconferencing, expert system-based feedback, computer simulation, multimedia, and more. While it is true that almost everything about learner-centered education could be done through manual methods, computers bring the costs in resources and time down to a level that at least the more affluent colleges and individuals may afford. And although almost everything could be done on a stand-alone computer, it now seems that global networking further cuts the unit costs of educational services, making possible the delivery of all this potential to everyone. With computing power doubling every 18 months, some commentators have, in fact, gone so far as to pronounce the "demise of the traditional university".

Illustrative is Peter Denning's[7] testimony before the USA's National Science Foundation, reprinted as an editorial in *Communications of the ACM*, a major computing publication. In his testimony, he asserted that the traditional university is based on four assumptions, which will all be eroded by information technology:

(1) The library as a physical place – soon to be replaced by digital libraries accessible worldwide by almost anyone;

(2) The "community of scholars" centred around the university library – soon to be replaced by communities of specialists linked electronically, divorced from geographical location;

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[6] *Communications of the ACM.* 1996.

(3) The ideal-typical small undergraduate class that has become unaffordable and will not be able to compete with commercially-provided education on the same subjects, such as computer science, especially in terms of entertainment production values;

(4) Job structures that have changed such that universities can no longer hope to prepare students for or promise them a "lifelong" career, their central selling point until recently.

Denning then asserted that salvation for universities lies in continuing professional education for adults, using the Internet and information technology as alternative delivery tools. Communication, reading, listening, writing, trust, compassion, self-esteem, service, diversity, humour, invention, innovation, coaching and other traditional educational values can be made consistent with and indeed reinforce this vision, according to him. His optimism is echoed in much of the distance-learning literature – the idea that any student may access, say, the USA's Library of Congress, analyse census data online, and, it is thought, receive individualised learning experiences worthy of college credit, delivered at their convenience right into their home or workplace is an educational nirvana which has college presidents scrambling to "prepared for the twenty-first century".

There are five basic supply-side themes to the "pro" literature regarding distance learning courses:

(1) *Dissemination*. Once one's course materials are ready for print or up on the web, any student with Internet access can get at them – so long as one allows it. By the same token, the student is learning through computers or other forms of delivery, hopefully becoming more comfortable with a technology apt to play a large role in his or her future career. Even more important than these aspects of dissemination is the hope that alternative delivery systems for education will do for the masses in the twenty-

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[7] Associate Dean for Computing, George Mason University USA.

first century what the public library movement did in the nineteenth and the expansion of public universities did in the twentieth. Online education potentially may be disseminated to millions who previously could not have hoped for a college education due to circumstances. With the erosion of job tenure and job security, moreover, the challenge of twenty-first century university education will more and more have to do with dispersed adult learners who must remain at work but retool for career changes. This audience, it is asserted, may be reachable primarily through online education;

(2) *Updating*. On the strictly academic side, media-based and online courses provide a currency not possible before. It is easy to add and change what is online so that it adjusts for student interests and questions in the course. It is not static like a traditional course packet. Lecturers can provide running "Most Frequently Asked Questions" columns and other updates via alternative media. More importantly, they can link to new university, governmental, news, and other resources as they appear on, say, the World Wide Web. Students can read working papers from a wide variety of peer institutions, obtaining them as soon as they are posted. If "staying on top of one's discipline" is a paramount academic virtue, online courses are a boon in conveying this virtue to one's students;

(3) *Interactivity*. Apart from more personalised delivery, distance learning, particularly through online education, is inherently interactive. It builds-in research tools in interactive ways as well. There is, however, a more important aspect of online interactivity: interaction with fellow learners. Although online courses may sacrifice face-to-face discussion and peer learning, it is possible to arrange discussion lists, bulletin boards, teleconferences, telephony, and even videoconferences online. At least potentially, computer-mediated learning offers the chance (a) to reduce parochialism by exposing students to a wider range, even international range of ideas, from fellow learners; and (b) there is some evidence that students who would be reticent in a face-to-face situation may feel freer to "speak out" when "protected" by the semi-anonymity of online education. There is also evidence that computer-

much more functional than, say, bringing a tape recorder to a traditional class; and

(5) **_Multimedia_**. One may incorporate colour graphics, sound, and movies as well as text into alternative modes of delivery. For instance, one can use "Lotus ScreenCam" to record computer application procedures. Students see what the instructor sees on the computer and hear a voice-over explanation. They can review the video demonstration as often as they wish, at their convenience, then try out what is demonstrated. Multimedia research materials which professional journals turn away for cost-to-publish reasons, such as data visualisation using colour graphics, can readily be mounted on one's web site for colleagues as well as students to appraise. Contrary to detractors such as Neil Postman[8], multimedia is not simply a matter of pandering to the "TV generation", the argument goes. Rather, it implements multi-sensory learning, which has routinely been found to be more effective pedagogically than uni-sensory learning such as reliance on texts alone.

Caveats to the ODL approach

The following issues, however, are raised by those less optimistic about the prospects for improving general levels of learning via distance education:

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[8] Neil Postman. **Amusing Ourselves to Death**. Penguin Books. 1999.

(1) ***Pedagogical pitfalls***.   We refer here to the comments that alternative modes of delivery lack the necessary visual or non-verbal cues that have been found to be essential to the learning process.   There are also concerns that while websites may easily be adjusted for online learning, in general, the ability to change or adapt instructional methods to suit individual learning requirements may be lower for these alternative modes than for traditional classroom instruction.   Finally, the often-ignored social context of learning is compromised by the tendency of distance learning to isolate students from each other, despite the possibility of forming study groups, chat zones, etc.   The individuality of instruction seems to trade off against the off-classroom community aspects associated with a traditional school or university environment.

There is also the matter of growing expectations.   When one puts up a web page, in the case of online learning, users expect to have kept it current.   There is little tolerance for down-time, or just plain slow speed, which is an all-too-frequent networking reality, frustration over which can also be displaced onto the faculty member.   Perhaps because the web comes to via a television screen, students (and faculty!) tend to think graphics is better and multimedia is better yet, especially if the competition for module production turns fiercer.   The "it ought to look as good as what we see on TV" expectation set is difficult to avoid, however one tries to downplay it.   There is also a broader aspect to the expectations problem which has to do with scale and the expectations of administrators.   Proponents of distance education are well aware that something essential is lost when face-to-face interaction is given up in favor of computer-mediated instruction or that which comes via correspondence courses.   However, they argue that this can be made up by online discussions and videoconferencing. It is easy to lose sight of the fact that online discussions and videoconferences face much the same constraints as traditional education.   One can't easily have good class discussions when teaching a class of 400, whether that class is face-to-face or online.   Traditional education frequently has responded with funding for discussion sections but one may detect an unwillingness

among administrative colleagues to face the reality that most alternative modes of delivery also require teaching assistants to handle discussion sections as well. If distance education incurs the added costs of courseware development yet one still has to have the same faculty size, the economic imperative of alternative delivery is undermined;

(2) **High "entry requirements".** These pertain to the characteristics required of students for them to make the most out of distance learning. Often cited are the fact that this sort of education requires self-motivated students who have writing skills and own good equipment. The University of Wisconsin-Stout, for instance, has developed a model of distance education that provides online courses using America Online, a major network access provider. Based on experience, it warns that "distance learning courses can be invigorating, personally motivating, and highly rewarding, but not all learners reap these benefits. Computer-based learners are: comfortable writing, are able to motivate themselves to complete assignments, and have the requisite equipment and connectivity";

(3) **Practical and logistical considerations.** We refer to matters such as the time it takes to produce materials and modules for distance learning and to place them on the Internet for access. Developing materials requires time and expertise in pedagogy not often available to university professors who specialise in non-education courses. In the context of a limited departmental staff, the time issue is a two-edged sword. Having sacrificed no small amount of extra time to mount an online course or develop a distance learning module, the temptation is overwhelming to capture back that time in some other way. One obvious way is to diminish the mentoring of students. Indeed, the erosion of mentoring is common in online education as face-to-face contact between student and professor is replaced by the colder and more formal computer interface and typed word. At the same time, the student is apt to suffer a diminishing of peer learning and student role modeling as well. This problem is not intrinsic to distance education, but it is endemic.

The future also bears watching. If mounting a course online or producing a correspondence module takes considerable time now, one can only imagine how it will be when such courses have to compete in the national and international marketplace for a limited market of paying students. Standards will inevitably rise beyond what is reasonable to expect of a single faculty member working alone. "Upping the ante" will be inevitable and it has been predicted that courseware funding to support full-featured educational products will correlate with market success in the era of universities and corporate trainers competing in distance education, particularly in its online component. Teamwork will be much more necessary, with each development team requiring a minimum of four members: the content specialist (perhaps the faculty member), the graphics designer, the programmer, and the web designer. Opinions will vary, but it is relevant to note that the typical cost for developing an educational CD-ROM for commercial distribution is two or three hundred thousand dollars in the US. CD-ROM development is in this ballpark because what is involved is more than a single individual can reasonably be paid to do – a team is required. When distribution of an educational CD-ROM is two or three thousand copies, not atypical, one can see the economics of the game tip against CD-based education in most specialisations;

(4) *"Narrowing" education*. Properly implemented distance education may cost more, not less[9], but the usually unspoken agenda of any sort of institutionalised education is cost reduction. Down that road may lie the enemies of quality education. One starts out creating one's distance learning course as a creative, even satisfying endeavor. However, it is not possible for any university to long allow faculty to make the extent of investment in this sort of alternative delivery a matter of personal, creative choice. As the phenomenon gathers momentum, two things happen. First, budget analysts get called in to cost out what is being done, perhaps with a mandate to explore

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[9] The economic implications of using distance education methods can be generalised as follows: (a) significant costs are incurred irrespective of student numbers – and paying these costs before enrollment revenues are collected is unsettling, (b) transmission and production costs are high for systems, (c) conventional, non-distance education system costs have recurring costs and vary according to the number of students; distance system costs can be regarded as fixed costs and amortised over the life of a course, (d) from an economic point of view, investment where student numbers are small is normally not warranted, and (e) administrative functions are more clearly differentiated from the academic functions in distance education systems; distance systems are more complex.

distance education as a more efficient "delivery mechanism" or as a way to cope with budget tightening.

Second, it becomes necessary to plan what one will say about one's distance education programme when the inevitable accreditation agencies come around. Both forces point toward typically expensive evaluation studies. The University of Phoenix "Online University", perhaps the largest US example, invests $130 per student per course in evaluation. The University of Athabasca, Canada's largest purveyor of distance education, has likewise recently implemented a system of performance indicators. Performance measurement of what faculty do is most easily accomplished by adopting outcome-based assessment. That is, the instructor must formulate clear learning objectives and students must be tested on them before and after. The University of Phoenix uses this methodology (and others) to come to the finding that distance (online) education students learn as much or more than traditional students. However, something is lost when the rich complexity of what the faculty teach and inculcate is reduced to a printed list of learning outcomes and test items used to assess each outcome. Education is narrowed toward training. Tremendous pressure is created to "teach to the test", which is what the assessment instrument in effect becomes. When distance education is part of a cost reduction effort, requiring human resources to be stretched to cover more credit hours, faculty resignation to the training mentality of outcome-based evaluation is all but assured.

Empirical evidence and some economic issues surrounding the relative costs of ODL and traditional delivery methods in selected countries

Several studies have been made of the cost functions for large distance learning systems as compared with conventional institutions[10]. Each shows the cost of the full-time equivalent student as less than in conventional institutions when the student numbers are large. In the UKOU, the factor is about ½, in the Japanese University of the Air the proportions are about ¼, 1/3 or 2/3 of the national university. But if degrees are

considered to be a valid performance measure and degrees obtained from both systems are at par with each other, then the graduation rate is an important measure. In China, this is around 70%, in Korea it is reported as 30%. In Costa Rica it is less than 25% and in the UKOU it is 55%.

For the outcome to show a parity of cost with the national universities, the graduation rate would have to drop below 30% in the UKOU and to 20% in Japan. But degree holders are not the only, or in some cases the major, product of distance learning and even in the UKOU – around 40% of those participating in its courses are only taking them as a single course and not proceeding to a degree. It is possible, for vocational courses in particular, to *undertake the cost comparison in relation to the training field*. In the UK context, for example, providing student numbers exceed 500 per course, the costs to the client are in the range $4-$8 per student hour against the off-site course. This considerably enhances the cost advantage to the distance learning mode.

But then another issue arises. That is the viewpoint of employers concerning the charging policy by institutions which are in the main funded by government. Employers argue that their taxes contribute towards the cost of the public education system and so at least the provision to them should be subsidised. Government argues that is part of the development cost of products and services.   As a result, considerable discrepancies can arise in the marketplace with the winning pressure generally toward full cost fees. Also, since staff costs are an important part of the educational budget in conventional systems, courses in this mode have a much higher cost at the university level than at the primary or secondary school levels. Distance education costs will vary less over this range so cost savings will appear greater at the higher academic levels, as evidenced by analyses from Korea, Israel, Mauritius, Kenya and Brazil. Numbers of students need to be larger therefore in the school level to maintain a similar level of cost-effectiveness.

Another issue concerns the different profile of the whole integrated distance learning system. Analyses have been undertaken which show the following features. Academic

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[10] Muta, H. "The Economics of the University of the Air in Japan". *Higher Education*. 1985, and Wagner, G. "The

staff costs can be down from the 60 to 70% of the total budget that they represent in an institution to 25 to 30% in a distance learning system and that can include the part-time staff costs. If costs are allocated to the headings of teaching department costs, material costs, interactive teaching costs (tutorials and academic computer service) and overheads, including the administrative support systems, the UKOU analysis shows that approximately 16% is on teaching department costs, 21% on materials production costs, including the BBC costs; 18% on the interactive teaching costs and 44% on overheads. This distribution clearly demonstrates the need for large student or trainee numbers to improve cost-effectiveness, since essentially only the materials production and interactive teaching costs vary linearly with the student number, and these represent only 39% of the total costs. The course cost profile can vary considerably and the basis for the allocation of high cost resource such as television should be well argued.

A helpful external environment

The growing fascination with distance learning, notwithstanding the number of valid criticisms thereof, has been reinforced by a more receptive international policy environment that was the outcome of UNESCO's Education-for-All programme, along with the Delors Report of the European Commission. Both initiatives took the 1948 Universal Declaration of Human Rights and expanded its scope, noting that "every person – child, youth and adult – shall be able to benefit from educational opportunities designed to meet their basic learning needs." It was also in the 1990s that the philosophy of "lifelong learning" was introduced, as a means of preparing people for a world of accelerating change.

Economics of the Open University Revisited" *Higher Education*. 1977

The local scene – a brief history

In the Philippines, distance learning[11] is carried out primarily through the print medium, and occasionally through radio and television broadcasts, although the present administration has made definite pronouncements about its intention to embrace online education. Non-formal education in the Philippines traces its roots to the early 1970s, with a UNESCO study according importance to the non-formal sector as a viable alternative for those without access to formal education. There are a number of programmes, described briefly below, which constitute the current state of distance education in the Philippines:

LITERACY EDUCATION. Administered by the Bureau of Non-Formal Education (BNFE), it is organised for out-of-school youth and adults in all 14 regions of the country. It serves to shorten the learning time for basic literacy to just three months. The project has benefitted more than a hundred thousand out-of-school youth and adults in 13 regions. Its Female Functional Literacy Programme focuses on the 7 provinces in the Visayas and Mindanao where illiteracy rates among women are highest. It would be useful, in fact, to consider the potential distance education has for those students who are not only poor but have special difficulties obtaining access to formal education either because they are child labourers or are otherwise physically impaired.

LIVELIHOOD SKILLS. Under the Livelihood Skills Development Programme of DECS, the unemployed and underemployed are equipped with vocational and technical skills via short-term training programmes. In 1990, 133,473 trainees graduated from similar programmes. Given that there are at least three such programmes put in place under different agencies (the NMYC, DECS and SEAMO-INNOTECH), it may be worthwhile to explore the benefits of some form of centralisation and rationalisation in order to facilitate the expansion of these programmes.

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[11] CHED Memorandum Order No 27 (1995) provides the formal definition of a distance learning programme as one in which "at least half of the total number of hours required for a degree programme is offered outside of the confines of the formal classroom set-up where student-teacher contact is normally required. Distance education may be delivered using instructional materials, video, radio or teleconferencing with sufficient provisions for valid and reliable testing and evaluation procedures".

CERTIFICATION AND EQUIVALENCY PROGRAMMES. Executive Order 330 dated 30 July 1996, establishing the Commission on Higher Education also specifies a mandate to expand and strengthen tertiary education equivalency and accreditation programmes. This is clear recognition that the acquisition of expertise and skills are processes that take place within the work environment and that credit ought to be given for this. At present, there are two such certification programmes in the Philippines – the Accreditation and Equivalency Programme of DECS and the Continuing Learning Delivery System under BNFE, which is classified as an alternative equivalency programme. Much work still remains to be done, however, in exploring ways to bridge the gap between funding extended to the formal and informal sectors (it has been estimated that less than 8% of the intended clientele of the non-formal sector was reached in 1998, while the formal sector reached 57% of its clientele, as a result of this budget discrepancy). Along with this is the pressing need to assess the relative potential of these two systems and map out systematic linkages that are the key to avoiding duplication and coordination problems.

Mobility and the gains & losses from liberalisation – the relationship to ODL

Understanding the impact of liberalisation upon the labour market in mainstream economic theory is primarily about recognising the importance of *mobility* – that is to say, the ability of an economy to transfer its labour resources from inefficient sectors, which "lose" from the liberalisation process, toward efficient (and presumably expanding) sectors. The act of opening up a sector may therefore be construed as an income-redistribution policy and creates "winners" and "losers", with the magnitude of the gains and losses depending almost entirely upon the mobility of the potential losers[12]. In a "frictionless" economy (one in which all factors are mobile and can be instantaneously transferred from one sector to another), no one need lose from liberalisation. As it is, however, factors of production such as unskilled labour tend to be immobile or "specific", at least within the formal sector of the economy.

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[12] Paul Krugman & Maurice Obstfeld. **International Economics: Theory & Policy**. Harper-Collins. 1998.

The appropriate response to globalisation for those who believe it to be beneficial and inevitable, therefore, is to take steps to increase the mobility of specific factors – a task which many commentators would willingly assign to the state, given that mobility has strong public good characteristics. The result of this general consensus has been a preference for safety nets with, say, a larger re-training component than those with a higher proportion of transfers.

The general economic context: an emerging international division of labour

This domestic process of redistribution, however, takes place within the wider context of a so-called "international division of labour"[13] in which technology-intensive industries locate in the developed world while progressively more labour-intensive ones move to the developing world, following direction of least-cost labour. The push-and-pull forces at work in this process are essentially the same as those which led to the massive flows of internal migration in the 19th century in countries such as the United States as well as transfer of labour-intensive industries to East Asia in the 1980s, with one qualification: the speed at which this is happening is said to be increasing.

A frequently-used taxonomy of countries has evolved out of this concept: a first group of countries is composed of the two dozen or so richest nations producing a full four-fifths of the world's measured economic activity, housing its top 200 corporations[14]. Most of the world's trade and investment takes place within them. The group to which the Philippines is said to belong consists of those countries that have achieved some limited industrialisation but are still predominantly dependent upon agriculture (locally, for 17% of GDP but 39% of employment in 1999)[15]. Typically, the development strategies of these countries consist of some form of rural industrialisation. But only very few have any real prospects of becoming members of the industrialised world soon or ever.

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[13] Richard Barnet & John Cavanagh. **Global Dreams**. Simon & Schuster. 1994.
[14] Paul Kennedy. **Preparing for the 21st Century**. Random House. 1993.
[15] Philippine Statistical Yearbook 2001.

Among some two dozen aspiring nations, China, Thailand, Indonesia and Malaysia appear to have the best chances, but global economic conditions are now said to be less favourable than in the boom years when the Asian tigers achieved their very rapid structural transformations[16].

The reason for this guarded assessment lies in the choice of development strategy. Unlike the NICs, which built up networks of integrated industries in accordance with national development strategies, the would-be NICs for the most part have not had either the resources or the requisite political culture to follow such a course. Their strategy, instead, has been to integrate their labour forces into global production chains that are largely outside their control. This they do by inviting foreign-owned, labour-intensive assembly operations into their territories. It must be made clear at this point that Taiwan, Korea, Singapore and Hong Kong had a different approach; these governments promoted foreign investment in local factors but took a heavy managerial role in economic development. The result was dramatic economic growth. In recent years, however, production enclaves have spread to such places as Mauritius, Jamaica, Guatemala, Panama, St Lucia, Sri Lanka, Barbados, Belize, Costa Rica, Haiti, and the Philippines where the governments for various historical reasons have neither the resources nor the inclination to follow the interventionist policies so successfully pursued by South Korea and Taiwan.

This has important implications for the country's labour force because it ties the prospects for employment firmly to a much more volatile world market, as opposed to the domestic-demand driven economies of, say, the US and Japan. In these countries, and indeed in a good number of NICs, trade flows, while increasing in absolute terms, are still surprisingly small compared to the contribution of domestic-directed production and consumption[17]. Many argue that this strategy is what has afforded them some insurance against the unpredictability of world markets. The implication here, however, is that countries like the Philippines, having chosen this type of development strategy, are under greater pressure to achieve the kind of labour mobility needed to respond quickly to what

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[16] Robin Broad & John Cavanagh. "No More NICs". *Foreign Policy*. Fall 1988.

are often asymmetric changes in the demand for their export goods. This, of course, it is alleged, can only be done through a commitment to what UNESCO has termed "lifelong learning". ✶

PART II: LABOUR & EDUCATION MARKETS AND THE CURRENT ODL ENVIRONMENT – A CASE OF PERSISTENT MISMATCHES

THIS SECTION IS divided into three parts. In the first, we describe what has often been referred to as a "changing" post-liberalisation labour market and identify both the most vulnerable sectors and the emerging "sunrise" industries. The objective is to characterise the nature of future labour requirements for the Philippines.

In the second, we take a closer look at the supply side and map out the process by which labour sector entrants are produced. While the data used will be fairly recent, those who have been studying the sector for some time now will not be surprised at the conclusions. Persistent mismatches between graduate output and the demands of national development, inefficient resource use, equity problems, lack of rationality in the planning of programmes, and a desperate need for a change in governance have all been cited in the reports of both national and international agencies. It is necessary to discuss these problems because of the critical role distance learning can play in a number these suggestions for educational reform.

Finally, we describe the market for ODL services – its extent, the characteristics of ODL providers and the current regulatory regime within which it operates.

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[17] Paul Krugman. **The Age of Diminished Expectations**. Harper-Collins. 1995.

The demand side: evidence of changing labour markets in the Philippines

Briefly, these are the important findings: there is little hope in propelling national industrialisation via the expansion of unskilled-labour industries; sunrise industries such as biotechnology, health care and robotics will require high inputs of skilled labour; flexible labour arrangements are becoming a more permanent feature of the market as a response to structural rigidities; and the changing behavioural characteristics of individual labourers are worth examining more closely.

At the macro level: no hope for unskilled labour

The emergence of China and Vietnam as centres of labour-intensive manufacturing in the region have put a damper on the country's hopes of developing via the traditional strategy of expanding industries requiring mass unskilled labour. Clearly there is a need to consider a different approach to industrialisation. And in any case, the pattern of world demand shows the highest growth in science-based products – a trend that the Philippines has already found itself in the midst of, as shown by the table below:

The table below is instructive:

TABLE 1.

Distribution of Manufactured Exports by Technological Categories (in %)

	Philippines			*World Ave*
Technological Category	**1980**	**1990**	**1995**	**1995**
Resource-based	34.0	21.8	11.1	15.1
Labour-intensive	47.9	40.8	32.3	17.9
Scale-intensive	9.0	9.9	8.3	23.7
Differentiated	4.3	9.2	13.9	23.4
Science-based	4.8	18.3	34.4	19.9

Of which:				
Technologically complex[18]	18.1	37.4	56.7	67.0
High tech	9.1	27.5	48.3	43.3

Source: World Bank

The composition of manufactured exports in the Philippines has changed dramatically in the last 20 years. There is markedly less dependence upon resource-based, environment-intensive products, as well as a steady weaning away from labour-intensive goods. Technologically complex products, on the other hand, are a growing source of comparative advantage for the Philippines. The country, for instance, is already the second largest export of software in Asia, after India. The same World Bank report from which the above table is derived has also shown evidence that the market for software exports worldwide is "vast and growing".

Additionally, there appears to be considerable room for further growth given the country's comparative share against the world. Science-based products are also less vulnerable to the entry of low-cost producers. Of course, the Philippines has serious problems linking this important export sector to the rest of the domestic economy, a condition well-described in Tullao (1994).[19] Measures definitely must be taken in order to increase the local content of export products as well as the technological capabilities of the domestic economy in general. These reforms, of course, will have major implications upon higher education given that skill upgrading is critical to raising overall productivity.

The report on "sunrise industries"

Most international agencies agree, on the other hand, that the future of Philippine exports lies in the areas of software development, heath care services, and biotechnology, where global excellence appears to be attainable. This, of course, will require the availability of a large pool of highly-trained workers specialising in computers, telecommunications, biotechnology and even robotics, as well as natural/medical scientists and production

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[18] "Technologically complex" includes scale-intensive, differentiated and science-based products. "High tech", on the other hand, refers to differentiated and science-based products.
[19] Tereso S Tullao Jr. **Tungo Sa Patakarang Industriyal ng Pilipinas**. DLSU Press. 1994.

managers[20]. It is worth noting that experts forsee a tight supply of such workers in the future given the overall increase in world demand for similar products. Again, this places additional pressure for quality output from the higher education sector.

Evidence of low mobility: emerging "flexible labour" arrangements

As the state's ability to provide re-training for vulnerable workers is compromised by historical problems of funding and inertia, the labour market has taken to improvising its own coping mechanisms. By far the most important are the set of "flexible labour arrangements" that have characterised the new labour environment. A number of these arrangements include the following[1]:

(a) the substitution of temporary and casual labour for permanent workers;

(b) increased use of women, apprentices and migrant labour;

(c) subcontracting components of production previously manufactured in firm's plants;

(d) subcontracting services (eg transport, packaging, maintenance and security);

(e) increased dependence upon overtime and modified day-shifts;

(f) use of pay systems based on piece rates and commissions in place of those based on working time or length of service.

More generally, the survival of firms in a liberalised market has often depended upon the adoption of "non-regular" employment (*ie* employment arrangements that provide no security of tenure of workers and those that exclude them from receiving non-wage benefits). The marked increase in this phenomenon is documented below:

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[20] Adriano Arcelo. "Education and the Labour Market: Policy Issues for Philippines 2000" FAPE 1994.

TABLE 2.

Non-Regular Employment in Establishments Employing 10 or More Workers Philippines: 1992-1997 (in thousands except percent)[2]

Year	Total Employment	Non-Regular Employment	% Share
1992	2 504	514	20.5
1993	2 564	547	21.3
1994	2 493	505	20.3
1995	2 692	672	25.0
1996	2 606	630	24.2
1997	2 865	808	28.2

* Average annual growth rate: 11.4%; growth in establishments's employment: 2.9%

When disaggregated by industry group, the data are even more revealing. The presence of non-regular workers is felt most strongly in industries whose products are largely seasonal or involve the marketing of products. The following recorded the highest share of non-regular workers: Construction (66%), Financing/Insurance/Real Estate/Business Services (40%), Agriculture/Fishing/Forestry (36.1%), Wholesale/Retail Trade (31%). All these form part of the country's services sector, accounting for 30% of the country's total employment.

TABLE 2 figures show a relatively stable proportion of non-regular workers, regardless of firm size, another indicator of the pervasiveness and permanence of this labour market trend. In other industrialised countries, this pattern of contractualisation and increase in the proportion of part-time workers is associated with the so-called "hollowing-out" of the economy. Curiously, however, this "hollowing out" is supposed to take place as heavy industries "migrate" abroad in search of cheap-labour production sites and are replaced by menial "service industries". It appears that this hollowing-out is a phenomenon that cuts across different countries as the same developing economies that are supposed to be receiving the migrant industries are themselves contractualising their workers.

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[21] *SPectrum.* Social Protection Unit of the World Bank. Spring 2001.

TABLE 3.

Non-Regular Employment in Establishments Employing 10 or More Workers by Industry Philippines: 1997 (in thousands except percent)

Indicator	All Sizes	Employment Size			
		10-19	20-49	50-99	100 and over
Total Emp	2 865	401	403	359	1 702
Non-Regular	809	109	116	104	480
% to Total	28.3	27.1	28.7	29.0	28.2
BY TYPE OF WORKER					
Contractual	401	38	43	50	270
Casual	135	18	16	16	85
Commission	170	34	28	22	86
Part-Time	63	11	19	10	23
Task Work	40	8	9	6	16

Source: World Bank Social Protection Unit

Retraining and continuing education as alternative safety nets

The imperatives of cost reduction and responsiveness to fluctuations in demand volume that give rise to these arrangements are, of course, at odds with traditional labour market institutions and social policies.   Such practices (eg unionisation, collective bargaining, tenure etc) are said to impede labour absorption and are seen as a drag upon a firm's ability to remain internationally competitive and are increasingly being undermined by a policy environment that is committed to market-determined wages and employment conditions.   So although the Department of Labour and Employment has taken steps to afford greater legal protection to these "special workers"[3], this legislation is largely

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[2] Survey of Specific Groups of Workers. Bureau of Labour & Employment Statistics.
[3] There is a 6-month limit to "probational employment"; apprenticeship is covered by RA 7796 with wages beginning at 75% of the statutory minimum for the first 6 months, for instance.

toothless in the face of the government's general and progressive withdrawal from intervention in the labour market.

This situation, which is also being experienced by other developing countries, is creating a dilemma for governments. Growing constraints upon the ability of states to act as insurers and job providers of last resort are contributing to the expansion of an unregulated informal economy rivaling the formal sector in size.

There are a few notable efforts at a compromise, however. The World Bank and other international agencies, for instance, have suggested the use of market-friendly employment insurance schemes such as UISAs (Unemployment Individual Savings Accounts) to keep workers within the formal economy. These programmes involve forced savings on the part of employees going to a special account which could be drawn upon in periods of unemployment or designed to help workers cope with other needs. These schemes have the salutary effect of preventing the moral hazard problems inherent in most state-sponsored unemployment benefit schemes. The downside, however, is that UISAs, being individual accounts, do not pool risk the way other insurance arrangements do, in addition to the fact that some government assistance may ultimately be needed to induce the most vulnerable non-formal workers to participate in the first place, especially when their incomes are too low to generate any meaningful amount of savings.

The implication of this is that re-training and continuing education look to play a larger role in the provision of safety nets against unemployment and the adjustments to globalisation, especially given the further liberalisation of the education sector. Indeed, the legislative momentum has been created as early as 1987 with the 19 sections within Article XIV of the Constitution dealing with education, science and technology, arts, culture and sports. Current leaders in education, government, religion, business and the NGO community likewise posit a lifelong learning orientation as a means to support economic competitiveness[4].

A closer examination of the potential for education and re-training as the basis for a viable safety net system is warranted, especially in the light of recent evaluations carried out by the World Bank Social Protection Unit. TABLE 4 below summarises the results of a cross-country comparison of various labour market interventions and the overall assessment for re-training is unmistakably subdued.

TABLE 4.

Overview of Active Labour Market Programmes (ALMP) Evaluation Results[5]

Programme	*Appear to Help*	*Comments*
Job search assistance Employment services	Adult unemployed generally when economic conditions are improving; women benefit more	Relatively more cost-effective than other labour market interventions (eg training) – mainly due to lower costs. Youth usually do not benefit. Difficulty lies in deciding who needs help in order to minimise deadweight losses to society.
Training of long-term unemployed	Women and other disadvantaged groups	No more effective than job search assistance in increasing re-employment probabilities and post-intervention earnings. 2-4 times more costly.
Retraining in case of mass layoffs	Little positive impact – mainly when economy is doing better	No more effective than job-search assistance and significantly more expensive. Rate of return usually negative on such projects.
Training for youth	No significant impact	Employment/earnings prospects not improved as a result. Real rate of return negative.
Employment/Wage	Long-term unemployed in	High deadweight and substitution

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[4] Ma Celeste T Gonzales & Ma Concepcion V Pijano. "Non-Formal Education in the Philippines: A Fundamental Step Toward Lifelong Learning" APEC-HURDIT. June 1998.
[5] *SPectrum.* Social Protection Unit of the World Bank. Spring 2001.

| subsidies | providing entry into labour force | effects. Impact analysis shows treatment group does not do well compared to control group. Used as permanent subsidy programme. |

It is evident that despite the popularity of re-training programmes such as those offered by way of distance learning and certification courses, their social rate of return appears to be negative – or at most not much better than the traditional job assistance services. Several reasons have been forwarded to explain this, not least among them being the large capacity requirements which must be present for these programmes to work. Such capacity needs include a viable network of employment service offices, certification and accreditation systems, skilled counselors and reliable connections between employers and the educational community – and is, almost by definition, slow to build.   The implications of this will be explored in **Part III**, as we propose a re-thinking of open and distance learning as more than just "delivery systems" for education, based on its present inadequacy as a means of ensuring international competitiveness.

Behavioural characteristics of labour market participants.

To round up the discussion on emerging labour market trends, we discuss the results of a fairly recent work by Michael M Alba & Emmanuel F Esguerra[6] on labour supply decisions, significant for its attempt to model the correlates of various modes of labour force participation in the Philippines under conditions of imperfect choice.   Given the presence of constraints upon the choice of working hours, labourers consider alternative modes of participation – full employment, invisible underemployment, visible underemployment and unemployment[7].   Despite the short reference period (3rd quarter

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[6] Michael M Alba & Emmanuel F Esguerra. "Estimating the Modes of Labour Force Participation in the Philippines". AKI-EBS *Working Paper Series No 2* . January 1999.
[7] Full employment (8 hours/day), invisible underemployment (working 8 hours but actually requiring fewer to accomplish tasks), visible underemployment (working fewer than 40 hours a week), unemployment (absence of even part-time work).

1994 FIES/LFS data), the use of a qualitative response model has allowed for the estimation of labour supply with appropriate demand-side considerations.

We view the results as valuable since they allow us a profile of labour force participants making choices under market rigidities – exactly the sort of workers who would bear the adjustment burden of liberalisation and would be the logical targets of re-training, continuing education or open learning programmes.

Some of the significant findings are that:

(a) Compared to their married counterparts and single female peers, *unmarried male workers are least likely to be fully employed*[8]. This is possibly because Filipino families tend to rely least on sons for financial support. In part, it may also be due to the fact that, as Alonzo *et al* (1996) found, in the Philippines, married women tend to remain in the labour force during their childbearing years;

(b) For women and single men, the probabilities of unemployment and visible underemployment decrease with age, whereas the probabilities of invisible underemployment and full employment increase with age. *For married men, the probabilities of unemployment and visible underemployment are higher for older workers whereas the probabilities of invisible underemployment and full employment are lower*. A possible reason for this rather unexpected result for married men is that, *as they get older, the more able among them may be moving out of wage-earning activities and into self-employment*;

(c) Each additional year of high school increases the probabilities of unemployment, invisible underemployment, and full employment, but decreases the probability of visible underemployment. Each year spent in college increases the probabilities of unemployment and full employment, but decreases the probabilities of visible and invisible underemployment;

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[8] all italics ours.

(d) The presence of elderly household members has a negative impact upon a worker's being invisibly underemployed or fully employed and a positive impact upon his being visibly underemployed or unemployed.

The Supply Side: Relevance of Philippine Higher Education

The table below shows changes in the composition of higher education graduates over a 10-year span. Together with findings similar to the ones given above, it is a commonly-used indicator of the "relevance" of the country's labour training to its industrialisation needs. On the one hand, the figures confirm many widely-held perceptions about the mismatch that exists between the needs of a developing country and the output of its universities. Perhaps the best way of describing the situation is one of continuity and change, with different types of market failures. For one, it is significant that Philippine higher education still continues to be dominated by an urban professional orientation, with no sign of developing a requisite preference for hard sciences and research. Business, commerce and accountancy still make up about a quarter of all graduates. Education continues to account for 15% of the pool, with the arts & sciences taking about 10%. The main changes are said to be in engineering and health, which doubled their share in 10 years. Of course, this increase is almost entirely explained by the rapid increase in enrollments in the more popular specialist IT and computer science colleges.

TABLE 5.

Graduates by Subject, 1987-88 and 1997-1998 (in thousands)[29]

	1987-1988			*1997-1998*		
	Subject	**Graduates**	**%**	**Subject**	**Graduates**	**%**
1	Business	73.3	26.4	Business	76.5	25.2
2	Med/Health	52.2	18.8	Engineering	72.7	23.9
3	Teacher Ed	45.4	16.4	Education	40.0	13.2
4	Maritime	32.7	11.8	Health	34.7	11.4

[29] CHED Statistics.

5	Engineering	32.0	11.6	Arts/Sciences	16.7	5.5
6	Arts/Sciences	27.8	10.0	General	13.6	4.5
7	Agriculture	8.3	3.0	Agriculture	11.0	3.6
8	Law	2.4	0.9	Law	3.3	1.0
9	Criminology	2.1	0.8	Mass Comm	3.3	1.0
10	Religion	1.1	0.4	Other	31.9	10.5

On the other hand, the table also does indicate how quickly the education market responds to changes in employment prospects. For instance, there is the noticeable drop in graduates from health-related professions, from 18.8 to 11.4 percent – no doubt attributable to the less sanguine job prospects both here and abroad. The same may be said of maritime education, which dropped out of the "Top 10" list. Furthermore, the demand for post-graduate courses has not increased from its historically low figure (in a recent survey, only 1.5% of newspaper advertisements carried postgrad requirements for entry), except of course in the teaching profession. But even this has been interpreted as evidence of a "demand spiral" in education in which graduates would rather pursue additional degrees rather than settle for entry-level work[30] – yet another socially inefficient allocation of resources. The coupling of mismatch problems along with the high sensitivity of student choices to job market signals is what has led experts to characterise the education sector as "unplanned".

Perhaps the most telling statistic showing the extent of the labour-education mismatch is the figure for the number of graduates taking jobs outside their field of training. The CHED Graduate Tracer Study of 1998 reveals an alarming decline in the number of graduates finding work in the areas they prepared for. The only exception was nautical science, which increased by 9%. In computer science, the percentages went from 76 to 39 (!), in fisheries from 67 to 21, in law from 62 to 40, in nursing from 85 to 41, in physical sciences from 64 to 20 and in teacher education from 77 to 42. In a calculation whose result can only be described as scandalous, it was determined that the actual unemployment rate may be discounted by about 40% by removing those graduates with high search criteria (say, those that would only accept employment in white-collar jobs in

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[30] Michael P Todaro. **Economic Development**. Harper-Collins. 1997

the urban sector) and those no longer in the labour market (say, those simply not interested in finding a job after repeated rejection).

The mismatches themselves are explainable in terms of market failures. On the demand side, there is the well-known "fetish for diplomas" that causes students to enroll in heavily subscribed courses without being able to properly read job market signals. On the supply side, there is the failure of capital markets to provide incentives to undertake the most efficient courses. The lack of well-functioning loan programmes, subsidies to socially preferred but expensive courses etc serve as structural obstacles to a more rational system of higher education.

Quite apart from the standard economic explanations for the state of the education sector are comments that these low entry rates are themselves indicative of a need for broader preparation involving generic or problem-solving skills. It has even been suggested in both the ADB and World Bank technical reports on the sector that a "bridging year" may be necessary to prepare students for proper specialisation – the sort that will increase their mobility and competitiveness internationally in the absence of domestic opportunities.

The Market and Regulatory Regime for ODL Services

Major participants

Distance education in the Philippines is provided across the education sub-sectors by a number of institutions, with relatively little coordination or regulation. It figures actively in the more general programme of non-formal education at the basic level, with provision undertaken by the government in collaboration with international organisations like UNICEF as well as various non-governmental organisations.

In the higher education sub-sector, private participation is far more pervasive. There are two publicly-funded ODL providers – the University of the Philippines Open University

(UPOU) and the Polytechnic University of the Philippines Open University (PUP-OU), each enrolling close to 2 000 students in various degree and non-degree courses.

From the private sector, there are 6 other providers, the oldest and largest being the Philippine Women's University College of Distance Education. Both types of providers operate by maintaining and/or co-opting a number of "teaching points" and testing centres around the country and abroad (PWU, for instance, has a centre in HongKong and PUP is in the process of setting one up in Japan).   Since CHED regulations mandate a minimum number of contact hours as well as mandatory tests, students must then report to the nearest facility at various pre-arranged dates as part of the course requirements.

TABLE 6.

Major ODL Providers

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(1) DECS

    (a) School Broadcast Programme (SBD)

    (b) Continuing Learning Delivery System (CLDS)

    (c) Rizal Experimental Station and Pilot School of Cottage Industries "Balik

    (d) University of Life Home Study Programme

    (e) University of Mindanao On-The-Air (UM Air Project)

    (f) Continuing Education of Teachers (CET)

    (g) Continuing Science Education for Teachers via Television (CONSTEL)

(2) Asian Institute for Distance Education (AIDE)

(3) University of the Philippines Open University (UPOU)

(4) Correspondence Accreditation Programme (CAP) for College Foundation Inc

(5) Polytechnic University of the Philippines Open University (PUP-OU)

(6) Philippine Women's University (PWU)

(7) Asian Institute of Journalism and Communication (AIJC)

(8) SEAMEO-INNOTECH

<u>The profile of a private sector higher education ODL provider</u>

Complete information on enrollment rates for UPOU, PUP as well as the private sector providers is forthcoming, but data are available for PWU-CDE and should be useful as a means of coming to grips with the prospects for ODL application given the latter's position as both the largest and oldest private ODL institution in the country. They indicate a large potential for growth given the rapid increases in enrollment (an average of 68% through 4 years, including a precipitous decline during the year of the Asian financial crisis) as well as the reasonably competitive tuition rates.

TABLE 7.

Four-Year Enrollment Trend, PWU College of Distance Education

Degree	1996	1997	1998	1999
Ed D	12	54	26	74
MA Education	114	160	188	297
MBA	0	18	54	113
MA Nursing	0	4	16	71
MA Social Development	0	0	16	23
Total	126	236	300	578

Source: Philippine Women's University College of Distance Education

The author also undertook a survey among students to try and construct a socio-economic profile as well as to answer questions such as how much time is allocated to studying under an ODL delivery system.

The data suggest that the average enrollee is within the expected cohort group for graduate students (26 to 45), married with children below 18, and employed. This would reinforce the notion that distance and time considerations are paramount in the decision

to undertake study at a private ODL institution. In the next section, we explore the possibility of using ODL to facilitate access for marginalised groups such as mature students, school-leavers and the illiterate.

It is also significant that the amount of time spent in study for ODL courses is in the range of 0-5 hours a week. In a series of interviews with PWU-CDE officials, it was revealed that students rated both the courses and faculty members remarkably well, with evaluation scores approaching the highest marks (the same officials, however, declined to release the results of the faculty survey). This suggests that the traditional fears of married, working students being unable to cope with the rigours of ODL-administered graduate work are largely unfounded – or at least not insurmountable.

Additionally, it was also ascertained that close to 70% of the enrollees are, in fact, themselves teachers undertaking enrichment courses and working toward higher degrees. This suggests that notwithstanding the fear difficulty stemming from the heavy workloads of faculty members, especially in public high schools (including, of course, their non-teaching duties), there appears to be considerable scope for applying ODL as a means of improving teaching competence, at least at the level of content knowledge.

It is worth mentioning at this point that there are safeguards for the quality of graduate courses offered by ODL; CHED regulations allow only Level III-accredited institutions to offer ODL programmes.

TABLE 8.

FREQUENCY AND PERCENTAGE DISTRIBUTION ON THE PROFILE OF STUDENT-RESPONDENTS TO REQUESTED SURVEY, ACCORDING TO SELECTED VARIABLES

Gender	Number	Percentage
Male	13	10.48
Female	113	89.52

Age		
18-25	11	8.87
26-35	52	41.94
36-45	46	37.10
46 and above	15	12.10
Civil Status		
Single	43	34.68
Married	78	62.90
Widow	2	1.61
Separated	1	0.81
Number of children		
With children < 18	56	45.16
No children < 18	25	20.16
No children	43	34.68
Time spent per week studying		
0-5	64	51.61
6-10	38	30.6
11-15	11	8.87
Over 16	11	8.87

Source: PWU College of Distance Education

The matter of matriculation and production costs is dealt with in the next few tables. The first highlights the per unit tuition fees collected per subject, along with the average cost of a print-based module. It must be noted that the PWU-CDE has entered into a formal arrangement with the College Assurance Plan Inc (which does not have university status) – for which an additional registration fee must be paid by enrollees passing through the latter. The data was included in order to give the reader a better idea of total matriculation costs.

TABLE 9.
Schedule of Fees

PWU Fees		CAP College Fees	
		Registration Fee	P500
Tuition Fee	P450/unit	Tuition Fee	P585/unit
Module/Subject	P200	Module/Subject	P260/unit

Source: PWU College of Distance Education

It is also possible in the next table to view the actual breakdown of costs according to their uses.   The cost per unit compares favourably with, say, Assumption College, St Scholastica's, and Miriam College, which have average tuition fees of P880/unit. However, the per unit cost of a programme at PWU-CDE is higher than the P365/unit cost of a non-ODL programme from the same university.

TABLE 10.
Breakdown of School Fees

Tuition Fees (P585/unit)	
Marketing Commission of 35%	P204.75/unit
Remittance to PWU (70% of P450)	P315.00
Retained at CAP College	P65.25
Modules (P260/module)	
Remittance to PWU	P200.00
Retained at CAP College	P60.00
Registration Fee: Retained at CAP	P500.00

Source: PWU College of Distance Education

Finally, we have representative production data for both audio-video and print-based ODL modules.   These instructional materials cover the requirements of three programme

categories: non-credit courses, livelihood projects, and credit courses. The output, although varied in subject, is fairly standardised in terms of production requirements. Each subject which is audio-video based, for instance, will have approximately 8-10 episodes, each episode running for 30 minutes.

TABLE 11.
Production Cost for Video-Based ODL Module

Package cost per 30 minutes is <u>P96,250</u> which includes fees to:

Director
Producer
Scriptwriters
Talents (voice and on-cam)
Original music composition
Storyboard
Art director
Cameras and recorders
Editing facilities and personnel
Videographics, computer titles, video special effects
U-matic working tape stock and edit master
Studio (for taping)
Sound recording studio for voice narration and soundtrack production
Location video coverage
Set design materials and construction
Research
Technical crew

Additional costs per dubbed copy

U-matic	P1 360.00
VHS	P650.00

Overall requirements for ODL programme

Production (programming)	P1 700 000.00
Production (engineering)	P26 178 778.00
Curriculum development	P37 067 598.00
Marketing	P356 950.00
Network development	P2 350 000.00
Administrative services	P996 000.00
Total	**P68 863 318.00**

Source: PWU College of Distance Education

The following notes are useful in interpreting the figures above:

Production (programming): involves the conversion of 16 Annenberg series programmes (a popular US-based ODL module) into 386 videos good for 210.5 hours, the equivalent of one ODL degree.

Production (engineering): refers to completely operational and staffed production set-up including studio, post-production and satellite links. Note that this expense, by its nature, is subject to economies of scale.

Curriculum development: constitutes expense for producing 24 undergraduate and 18 graduate modules and 15 how-to manuals which are then transformed into 960 undergraduate, 760 graduate and 60 non-credit scripts. Includes additonal translation into broadcast videos.

Marketing: funds the writing of two proposals (Metrobank, DECS), two marketing brochures (general, Annenberg series), 7 promotional videos (PDEC, Annenberg omnibus, 5 Annenberg series).

Network development: goes toward the setting-up of 100 TVRO stations, staging of national/regional networking workshops, and the resulting MOAs signed for implementation.

Administrative services: PDEC office set up, staff recruited and appointed; procedure for supporting line units with funds, supplies, equipment and services in place.

In the table below, on the other hand, we find the standard production cost for a print-based instructional module with given specifications.

TABLE 12.

Cost of Print Module Preparation (Average of 150 Pages per Book)

Requirement	Unit Cost
Writing	P15.00
Encoding	P8.00
Editing Subject	P2 000.00
Language Specialist	P2 000.00
Formatting	P20.00
Stenciling	P5.00
Illustration	P125.00
Printing Cost Per Copy	**P250.00**

Source: PWU College of Distance Education

This cost information, along with the successful developing-country cases documented in the next section, tends to confirm the economic potential of using distance learning on a large scale to reach vulnerable income groups. We use it to bolster the case for a government subsidy to this delivery mechanism given the tremendous cost-reducing effects of widespread application. It must, however, be pointed out that any impact ODL will have on reaching these marginalised sectors will be almost entirely dependent upon volume. The PUP-OU case is illustrative. For while students in PUP can study from P350 to P450 *per semester* in a baccalaureate course and from P537 to P852 in a graduate course, the P2 500 to P5 000 semestral tuition would be almost impossible to finance.

The regulatory regime: relevant CHED directives

Completing this section is a list of what the author perceives to be provisions relevant to the discussion of a national ODL policy. Most of them form part of CHED Order No 27 (25 July 1995), which provides a list of regulations to be followed by ODL institutions.

<u>Administration</u>

ODL application "demanded" of all higher education institutions in all programmes offered and activities sponsored.

Permits to operate ODL programmes are to be issued by the CHED Central Office rather than the regional offices

<u>Quality Control</u>

A separate accreditation system be established for distance education covering institutions offering distance education programmes for the first time, institutions with existing distance education programmes, and institutions that will offer additional programmes under distance education.

Foreign higher education institutions desiring to offer distance education in the Philippines through extension shall be subject to the guidelines issued by CHED on "extension classes"

There shall be required indication of subjects taken in ODL mode.

<u>Foreign ODL providers</u>

Only HEIs with Level III accreditation shall be allowed to offer ODL courses

The discussion of their implications and issues will be found in the next section. ✰

PART III: DISTANCE LEARNING AND ALTERNATIVE DELIVERY SYSTEMS IN THE PRODUCTIVITY GAME: TOWARD A POLICY FRAMEWORK

In this section, we develop the argument that distance learning can indeed be a meaningful way of increasing labour productivity (and thus competitiveness) – but only if it is done within the context of more wide-ranging reforms in higher education. At the most basic level, this involves rationalisation – that is to say, literally making sure that every aspect of ODL legislation and development has a socially-acceptable and well thought-out rationale.

This is why our starting point is the list of proposals formulated by the Presidential Commission on Higher Education (2000)[31], which provides a framework for overall reform within the education sector. The authors describe the proposals as being manageable and achievable although not nearly exhaustive enough to deal completely with the problems of Philippine higher education. They are, however, sufficient to create the critical mass of reform needed to generate momentum within a reasonable time frame.

Disturbingly, the report says very little about the role distance education and alternative modes of delivery can play in rationalising the school system. We intend, therefore, to present our proposed policy framework in four parts:

(a) a list of general reforms upon which the progress of ODL development is contingent;

(b) the potential contribution of ODL to each education sub-sector;

(c) a list of specific policy recommendations to rationalise ODL administration; and

(d) a discussion of emerging issues in Philippine ODL

We discuss each in turn.

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[31] Presidential Commission on Educational Reform. **Philippine Agenda for Educational Reform**. April 2000.

On the state of distance education and the need to rethink educational governance –
some critical across-the-board reforms.

The literature on rationalising education is fairly straightforward on a number of principles. One is that the first purpose of public subsidies to education, particularly to higher education institutions, should be to ensure equitable access – or, to put it more broadly, to create an environment free of structural biases to entry – given the public good characteristics of equitable income distribution.

A second justification is compensation for market failures, such as financing priority areas not covered by the private sector (*eg* high-cost disciplines and postgraduate education), as well as areas where benefits are high and captured by society at large, that is to say, are visited by positive externalities (*eg* research).

We list in this section, bearing in mind the aforementioned principles, the more general policy reforms that must be put in place in order to ensure that the development of ODL in the Philippines will be built upon a "rational" foundation. These reforms are critical to the success of any ODL initiatives and are to be considered separate from the ODL-specific policy prescriptions discussed subsequently.

General Reform #1: After "trifocalisation", the need for greater coordination among education sub-sectors

The "trifocalisation" of the Philippine education sector – into DECS, CHED and TESDA – that took place 8 years ago, was undertaken in order to improve the efficiency of the entire apparatus after decades of redundancy, policy ambiguity and low productivity. It has become apparent, however, that there is now pressure to increase the degree of coordination among these bodies in order to more effectively carry out national education goals.

As far as ODL is concerned, to a large extent, this situation cannot be helped. The development of non-formal education in the Philippines is the handiwork of a number of civil society groups and international organisations dating back to the 1970s, all working independently of each other. Gonzales & Pijano have come up with a classification of these initiatives:

(1) Literacy education spearheaded by the Bureau of Non-Formal Education. Examples of programmes falling under this category are the Magbassa Kita Project and the Female Functional Literacy Programme assisted by UNICEF. More than a hundred thousand adults and out-of-school youth in 13 regions of the country have been benefited by these programmes;

(2) Livelihood skills, of which the Livelihood Skills Development Programme of DECS is the best example. The target clientele include the unemployed and underemployed, who are grouped into industrial training, rural training, and special programme tracks;

(3) Certification and equivalency programmes which enable students to enter or re-enter the formal sub-sector. Best-known is the Accreditation Equivalency Programme of DECS. School drop-outs completing this programme gain re-entry or work through the accreditation of acquired knowledge and skills. There is also the Continuing Learning Delivery System, although it is geared largely toward developing competencies associated with the secondary school curriculum;

(4) Continuing education among professionals, which works in tandem with the Professional Regulations Commission to help degree holders acquire new skills and to keep abreast of developments in their professions; and

(5) Various school and university initiatives, such as the state-endorsed UP Open University and the PUP Open University.

The point, however, is that formulating a more coherent framework for integrating all these efforts is likely to be the most difficult task of the lot. For one thing, the Congressional Commission on Education[32] has found that regardless of government support and involvement, the strongest proponents and most active implementers of non-formal education in the Philippines have been and continue to be private schools, churches, civic organisations and foundations. This clearly calls for closer coordination and improved communication between officials and leaders in both the public and private sectors, as well as the NGO community. Systematic linkages are the key to avoiding the considerable overlap in functions and target clientele.

Also frequently cited in the literature is the need to strengthen partnerships among schools, homes and the community-at-large. The expansion of parent-teachers associations into parent-teacher-community associations which provide a springboard for self-management of schools is a noteworthy effort by DECS although modifications for higher learning systems clearly need to be explored.

General Reform #2: Rationalising powers and formulating a national education agenda

Although it is not, strictly speaking, within the scope of ODL policy, we refer to an often-cited asymmetry in the present trifocalised set-up. The DECS head is a cabinet-level official while the head of CHED has mere "Commissioner" status. All the major evaluations of Philippine education policy agree that this is a serious problem that needs addressing. Without commensurate powers, all attempts to articulate and enforce a coherent and rational education agenda will come to naught. Investing the heads of education sub-sectors with appropriate powers, as well as moves to rationalise (read: disempower) the mandate of legislators with respect to local-level budget allocation, are both of over-riding importance not just to the progress of ODL, but to educational reform in general. The prospect of members of Congress being able to threaten higher education

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[32] Congressional Commission on Education (EDCOM). **Education and Manpower Development Programmes**. 1993.

officials with slashed budgets following politically difficult reforms has long been an obstacle to the rationalisation of national education policy and must be dealt with swiftly.

Although gradual changes have been observed in recent years, the state of higher education in the Philippines is largely *laissez-faire*. The various bodies investigating Philippine education have repeatedly noted the problem of CHED executives having to perform essentially regulatory functions (sitting on the boards of SUCs, approving programmes, even signing special orders for graduating students) rather than taking on the more important task of providing strategic leadership and directing resource allocation. As a result, the operation of higher education institutions (HEIs) is driven largely by market forces, with very low levels of coordination among national authorities. There is also widespread differentiation in quality, considerable overlap in course offerings and a general resistance to reform from school owners and politicians who have benefited from this situation.

On one level, of course, this cannot be avoided; regulation is needed by HEIs. However, education experts have taken this to mean the setting and maintenance of institutional benchmarks, the development of policies and standards, rather than the performance of comparatively routine tasks. This underutilisation of CHED's capacity has been blamed not only inertia but an inward-orientation that prevents officials from considering useful models and best-practices from other countries.

Two culprits have been identified: the lack of a prominent pressure group to articulate a clear strategy for reform, and the lack of qualified professional staff (*ie* those with sufficient technical and scientific training rather than those who have degrees in teacher training and education) to run CHED.

In many ways, the state of distance learning programmes reflects this lack of national vision and coordination. Although its stated objectives are laudable (a good description may be found in the PUP's *Journal of Open and Distance Learning*), there is evidence of a need to rationalise the administration of ODL and bring it in line with the objectives of

other higher education sectors. One can point, for instance, to the greater priority given to access and equity, rather than efficiency. From documents obtained from the UP Open University and the PUP Open University, it is clear that the selling point of ODL is the ability to obtain a degree despite high transaction and opportunity costs. We can also see this from a reading of the CHED's general policy on ODL (Memorandum Order No 27) which cites *only* the need to "make quality education accessible to a greater number of qualified Filipinos". Further, an examination of the courses offered by the two major ODL institutions, indeed, shows a virtual mirroring of those already offered by conventional universities – courses which are already (from a social point of view) heavily subscribed and the outcome of distorted or uninformed consumer preferences (such as the bias for government employment in the provinces). We refer to programmes such as those for teacher training, social work, mass communication, etc.

The point is that in the absence of stronger strategic leadership by CHED, as well as greater coordination among the "trifocalised" agencies, the availability and expansion of distance learning courses may have the perverse effect of increasing the number of "redundant" (though diploma-bearing) graduates. Today, the existing ODL programmes have been marketed as either substitutes for a generic university education for those unable to obtain one or as a means of promotion (especially for those in the teaching profession). Little if no attention has been paid to its potential to address labour supply gaps or correct long-standing distortions. This outcome, unsurprisingly, is the result of a policy vacuum.

At the risk of sounding repetitive, this is where the importance of a well-articulated policy direction for higher education lies – one that takes into account the needs of a changing labour market and puts the proper distortion-correcting incentives in place. The survival of public-private sector collaboration in ODL is better guaranteed by a system designed to reduce existing overlaps and prevent the inevitable "race to the bottom" of quality standards already seen in traditional institutions. This matter is made even more urgent by a provision in the General Policy that "*demands (ODL) application by all higher education institutions in all programmes offered and activities sponsored*".

General Reform #3: Improving teacher welfare

This point seems self-evident, but must be emphasised since a major contribution of ODL around the world is in teacher training. Concerns have been raised about the ability of ODL to improve teaching competence given the high entry requirements (time, motivation) in an educational environment where salaries and morale are low and where teachers are overworked, having to attend to a number of extra-curricular tasks (*eg* election-watching, entertaining public officials, hosting programmes, etc). We can only say at this point that any efforts to raise the quality of life of teachers will go a long way toward increasing the positive impact of any ODL initiatives.

Contributions of ODL to different education sub-sectors

In this section, we argue that each of the education sub-sectors stands to gain from rational ODL application. The operative word, however, is "rational", and that requires us to identify the activities best-suited to ODL administration.

Basic Education: solving problems of access for the most vulnerable sectors

The documented evidence from developing countries of ODL helping to overcome longstanding problems of equity and access is overwhelming. Given that figures for cohort survival and dropout rates are well-known, there is little need to belabour the point that ODL lends itself particularly well to addressing obstacles to access – and on the side, helping to alleviate structural problems of high teacher-student and low pupil-textbook ratios seen in the tables below.

TABLE 13.

STUDENT/TEACHER RATIOS IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS

Schoolyear	Elementary	Secondary
1981-1982	30.92	29.18
1987-1988	31.48	30.19
1991-1992	33.52	32.72
1996-1997	34.27	34.03
1997-1998	35.00	34.00

Source: 1998 PESS *Technical Background Paper No 2*

TABLE 14.
TEXTBOOK SITUATION SY 2000

Number of textbooks needed to achieve 1:1 ratio	96.4 million
Estimated number of usable textbooks	30.0 million
Pupil-textbook ratio (without CY 2000 funded books)	1:3
Number still needed to achieve 1:1 ratio	66.0 million
Budget requirement needed to achieve 1:1 ratio	P3.3 to 4 billion
Number of textbook that may be procured	>21 million
Resulting pupil-textbook ratio	1:2

Source: *Q&A OPS-DECS*

We focus, then, on the case studies of successful ODL implementation, taking care to underline the characteristics of these programmes worth considering.

In Brazil, the programme *TV Escola* provides training for primary school teachers in remote areas. More than 79 million reals (US$73.1 million) have been spent on this project, and about 50 000 schools have received technical kits that include satellite dishes, television sets, videocassettes and tapes. In addition, <u>a Fund for the Development of Primary Education and Teacher Improvement was created to increase the extremely low wages paid to teachers</u>.

In Andhra Pradesh, India, there is a programme to place working children in schools. In April 1997, the Andhra Pradesh Social Welfare Department initiated a pilot back-to-

school programme for all 23 districts in the state, <u>in which hostels operated by the department are converted into "camp schools" for two months each year</u>. The programme identifies and enrolls children who never enrolled in school or dropped out early. Special emphasis is placed on bonded children, children working as domestic servants, and children from lower castes, tribes and other socially disadvantaged backgrounds. Each hostel has approximately 100 students and five teachers. Children attend class for an average of 6 hours a day – the approach is modular and uses print materials produced centrally. In its initial phase in 1997, the programme enrolled 37 000 children in schools; the Social Welfare Department plans to enroll 100 000 students each year in the future. About 74% of the students enrolled in the camps were subsequently admitted to formal schools.

In Nicaragua, the Ministry of Education has initiated an innovative education programme called *Extra Edad* to serve children and adolescents who are unable to complete their primary school education on the normal age and grade track. <u>Classes are taught in modules to permit maximum attendance during off-work hours and eliminate the social stigma associated with older students attending classes with younger children</u>. The Ministry of Education has conducted special training courses for the teachers in this programme as well. In 1993, about 9 600 children between 10 and 15 years of age participated in the *Extra Edad* programme.

Since 1997, the government of Guatemala has been implementing a number of programmes to make school schedules more compatible with those of children working in rural areas. These programmes are based on a student-oriented, flexible teaching structure that relies to a great extent on independent study outside the classroom. <u>One of the flexible school day programmes enables primary school children who spend the early morning hours working on farms to begin school later in the day. The fewer hours spent by students in the classroom are compensated for by more independent study at home</u>. The programme was initiated in Mayan communities in 1997 and was expected to be broadened to cover 80% of all primary schools in rural areas by 1998.

Another programme targets children of families who migrate to harvest coffee and sugar. It provides for a flexible school year to enable children to resume their studies at their community-based school after the harvest without having to wait for the schoolyear to begin. This programme also relies on independent study to help offset the fewer hours spent in the classroom by students.

In Mexico, the Secretariat of Social Development's National Agricultural Day Labourers Programme (PRONJAG) recently developed a programme to provide increased access to basic education for migrant farm workers's children, many of whom work in the fields. It consists of a system of educational modules that will enable migrant children to complete a grade without attending the same school for an entire academic year. Under this programme, children can enroll in a school in their home state and complete the schoolyear in another state if their parents migrate for the agricultural season. The curriculum is likewise tailoured to offer skills and knowledge valuable to the predominantly rural population.

The National Open School in India offers free choices from among a wide range of both academic and vocational courses to students who frequently opt for different combinations of the two areas. In addition, it offers courses for life enrichment and bridging courses at the entry level. It caters to students of all ages over 14 and has succeeded to attract women to the extent that they make up 38% of its enrolment. Marginalised groups in general, including women, comprise over 50% of its enrolment. In making use of the different media, it puts great emphasis on quality aspects of the technology of text, but does not shy away from more advanced technologies, such as instructional television as well as audio and video programmes for enrichment purposes, in addition to face-to-face contact with students. By making use of the existing school network to serve its students, it benefits from that infrastructure at the same time that it enriches it by bringing in facilities not normally available to the schools. Its courses are offered in English and a variety of local languages.

Indonesia's "Packet A", a mainly print-based intervention, concentrates on action for learning at the grassroots level, attending to the needs of out-of-school learners as an integrated component of the overall concerns of the country. Its operating principle is to motivate any available educating power in the community, combining face-to-face tutorials with self-instructional models. Under the "each-one-teach-ten" principle, its benefits rapidly multiplied. Eight million students are reported to have trained nationwide through "Packet A", 60% of which are women. The package, equivalent to formal primary education, provides literacy training while at the same time catering to post-literacy needs. The package de-emphasises purely academic concerns in favour of covering relevant science issues and concentrating on life skills.

Pakistan's Allama Iqbal Open University reaches its students in their homes or workplace at any time during the year. In its efforts to meet the basic learning needs of all, it targets, among other audiences, rural non-literates, particularly women, offering literacy courses and functional skills training. For its regular range of distance education courses, which range upwards to the level of degree courses, the university supplies its students with complete self-instructional packages that are mainly text-based, but also include audio cassettes. Radio and TV programmes supplement the packages, which include self-assessment instruments and written assignments for students to submit and receive feedback on. Students receive tutorial support from teachers appointed for that purpose in their own locality. The system also includes study centres, offering the students a variety of learning resources and an environment that facilitates contact with tutors and fellow students, as well as regional offices and a main campus. To reach the non-literates, the normal distance education methodology had to be adapted. The methodology developed for the university's Basic Functional Education Programme uses packages consisting of cassettes and flip-charts and concentrates on developing infrastructure for outreach and the training of trainers.

It is important to note that in each of the cases mentioned, long hours of work and similar burdens have *not* diminished the success of ODL programmes, contrary to popular belief. Indeed, there is reason to suspect that in a country like the Philippines, where education is

highly-prized, there will be an ever greater response to increased access via government-supported ODL programmes.

Higher education: improving teaching competence, a compromise on the "pre-bac" year, increasing the quality of professional review services, maximising the scope of COEs and CODs in graduate training, and helping to phase out inefficient HEIs

IMPROVING TEACHING COMPETENCE

The proliferation of normal schools, popularity of education as a course preference in this country, and a stated commitment to increase the number of master's degree holders from 30 to 70% does not mask a general weakness in the quality of instruction, particularly at the basic and secondary levels. International league tables confirm what most people believe about the declining quality of math, science and language instruction in even urban private schools. Thus we must carefully qualify the implications of this upon available ODL programmes for teaching enrichment.

We confirm from the table below that at present, of about 80 000 teachers at the tertiary level, only 33% have a master's degree of which 7% possess doctorates in addition to the 6% with a Medicine or Law degree. The Department of Science and Technology (DOST) and the Department of Education, Culture and Sports (DECS) started a major tertiary-level faculty development effort in 1991 called the Engineering and Science Education Project (ESEP). Its objective was to raise the level of teaching and research competencies by encouraging teachers to pursue master's and doctoral studies, in addition to short-term local and foreign training programmes. ESEP also provided research equipment and library materials to selected universities. In spite of its relative success, however, studies show that the ranks of adequately-trained teachers have not reached the critical-mass level.

TABLE 15.

DISTRIBUTION OF FACULTY BY HIGHEST LEVEL OF EDUCATION AND BY RANK: ACADEMIC YEAR 1996-1997 (PUBLIC AND PRIVATE)

Faculty Rank

Highest Level of Education	Below Instructor	Instructor	Assistant Professor	Associate Professor
Vocational/Technical	659	679	74	26
Pre-Baccalaureate Diploma	292	1 688	82	20
Baccalaureate	6 505	25 924	3 942	952
Post-Baccalaureate Diploma	544	2 688	676	170
Doctor of Medicine and Ll B	201	1 791	1 697	652
Master's Degree (MA/MS)	862	5 742	6 743	4 489
Doctoral Degree (PhD/Ed D)	84	409	624	1 207
Level Unknown		14	1	5
Total	9 147	38 935	13 839	7 521
Percentage	11.35	48.32	17.17	9.33

Source: CHED *Statistics*

Realising that it does not have the resources to support the more than 1 100 higher education institutions, CHED has chosen to focus on the expansion of Centres of Excellence and Centres of Development. Faculty development, equipment and library development are the underpinnings of the implementation plan. The amounts involved, however, are relatively small and these benefit mainly the COEs and the CODs.

There is an alternative, however. If the target of increasing the faculty members with a master's degree from 33% to 70% is to be met in 5 years and assuming that the master's degree programme could be finished in an average of 2 years, it would mean administering four groups of teachers, each of about 7 400 persons. If 100 COE or COD departments were identified to implement the programme distributed according to type of degree, each department would be handling a manageable number of 74 teachers per year. The proposed programme would cost approximately P100 000 per teacher or a total of about P3 billion. When compared to the figures detailing the cost of module production presented earlier, we can surmise that the total expenditure of the government

for improving teacher competence may be substantially reduced, especially if the expected scale economies are experienced. The mechanism seems straighforward – deputise COEs and CODs to produce print or broadcast-based ODL modules, rigorously formulated and tested, and then have the modules distributed nationwide to ensure the widest access, using, say the information provided in the following table as a guide to allocation.

TABLE 16.

Distribution of Faculty by Region and Highest Level of Education: Academic Year 1996-1997 (Public and Private)

Highest Level of Education								
Region	Voc	Pre	Bac	Post	Med	Mas	Doc	Percent
I	94	138	2 913	218	287	1 236	397	6.56
II	51	44	1 332	128	65	1 218	288	3.88
III	127	85	2 826	447	269	1 816	496	7.53
IV	138	343	3 087	538	437	1 427	309	7.85
V	134	221	2 910	383	334	1 518	369	7.28
VI	156	313	3 790	422	283	1 306	186	8.05
VII	124	70	2 373	166	298	931	342	5.34
VIII	57	80	1 582	233	149	900	267	4.06
IX	9	35	828	44	33	253	29	1.53
X	128	108	1 914	58	176	713	229	4.13
XI	32	82	1 840	181	250	696	72	3.95
XII	156	176	2 084	200	109	1 092	220	5.01
NCR	76	396	10 191	997	2 075	6 507	2 492	30.08
CAR	47	24	1 189	44	213	666	207	2.97
ARMM	3	7	93	3	3	72	10	0.24
CARAGA	116	12	706	60	26	298	41	1.56

Source: CHED *Statistics*

On the other hand, in-service training (INSET) programmes may then be research-based and would in principle be more supportive of efforts toward decentralisation. Such programmes could be under the care and supervision of each of the 143 School Division Superintendents across the country.

There are successful case studies of ODL being used on a large scale to address problems of teaching competence. China, which has used mass communication media for

educational purposes since 1958, has 170 radio and TV schools at the secondary level and 43 radio and TV universities with 575 learning centres and 1500 teaching points. China Educational TV distributes programmes, including those produced by the China TV Teachers College, via satellite to all parts of the country. Local educational TV stations and satellite relay stations re-broadcast the received programmes. They also broadcast locally produced ones. The medium is reported to have an especially remarkable impact in remote and disadvantaged areas. During the last 6 years, 1.2 million primary and secondary school teachers participated in courses offered via this channel.

Of particular interest is the Teacher Training Through Distance Education project, in which local governments in China cooperate with UNICEF in setting up TV relay stations, receiving stations and teaching points to the needs of unqualified teachers. The programme has in mind that 1.5 million school teachers, out of five million, did not meet the national requirements in 1989. A large number of these teachers live in rural areas and minority regions. The project specifically targets 26 counties that are particularly behind in the development of education and aims at correcting the situation through the use of educational TV, in conjuction with the existing infrastructure of the counties's Normal Schools, to upgrade teacher qualifications. Cost savings and rapid returns on investment have actually been reported.

A REASONABLE COMPROMISE FOR THE CONTROVERSIAL "PRE-BACCALAUREATE" OR "BRIDGING" YEAR

Reports reaching as far back as 1949 have decried the comparative lack of schooling years for the average Filipino student – 10th in Asia based on the latest figures. Although there is some merit to the argument that an extra year is a poor substitute to proper textbooks, classroom facilities and trained teachers, the current practice of elite HEIs subjecting their students to preparatory courses provides the best evidence in favour of the policy. There are serious problems concerning the general degree of readiness among

undergraduates to handle subjects at the tertiary level – indeed, most spend their first two years at university making up for the poor instruction received at the secondary level. Repeated failure and attendant dropout rates that come as a result of this prove to be major sources of frustration for both students and parents. Certainly, the system cannot possibly compare favourably with the long-standing developed-country tradition of A-levels or junior college. In an earlier section, this low level of preparedness was also identified as a reason for low rates of entry into chosen areas of specialisation (the evidence from board exam mortality rates is most telling).

Given the target learning assistance package of 36-42 units in language, science and mathematics, as well as the expected unpopularity of the requirement among the fee-paying public, ODL offers a reasonable compromise. Since, by definition, the standards in question ought to be national, and the prospect for economies of scale is great, the administration of the programme through ODL techniques is highly recommended. This gives greater flexibility to the student, as he/she will not be required to attend formal classes and may then choose to work or pursue vocational training instead (the policy includes an equivalency test for those who have completed enough vocational ed units). Additionally, scale economies available because of the programme's national scope can reduce the cost of obtaining standardised preparation considerably. This, needless to say, is critical to the success of the policy.

Likewise, it is again worth addressing concerns that the "high entry requirements" (sufficient grasp of basic skills, motivation, the need for a social context of learning, etc) of ODL-type programmes may pose a threat to the success of the policy. The response is three-fold. One, the fact that developing countries have managed to implement this strategy successfully even among illiterates undermines the fears of ODL inappropriateness among those who presumably want to enter *higher* education. Two, the concept of a "bridging year" itself carries with it the properties of a screening device one of its purposes is *precisely* to weed out those who would otherwise be better off doing technical or vocational work given their aptitudes. Three, this screening is in the end necessary to streamline higher education – and an ODL-based pre-bac year certainly

affords the individual the greatest amount of latitude in both preparing himself/herself for the rigours of university education and demonstrating that he/she deserves a place in a more competitive higher education sector.

Re-defining basic education in the lingua franca

Although there are still very vigorous debates about the effectiveness of bilingual education, the PCER report has continued to endorse the policy. On the premise, however, that teaching in the *lingua franca* will allow students to use their home language as a bridge to effective learning in English and Filipino, the Commission has recommended that Grade One subjects be vernacular-based. This opens the door to several possibilities.

The first is a system of public incentives to distance learning materials produced using the major regional languages, aimed toward minority populations who themselves are not fluent in any of the approved vernaculars. Part of the vulnerability of indigenous groups, after all, lies in their inability to speak the major regional languages, given their geographical isolation and other aggravating factors. The policy choice articulated above, creates, at least in principle, a mechanism for accommodating marginalised groups into the language mainstream. Interestingly enough, the creation of a market for indigenous literature is an excellent way of inducing community-specific economic activity with large spillovers completely shielded from foreign competition. The initiative would, in effect, be self-financing. ODL modules would help increase literacy and, in so doing, enlarge the future market for literature produced using the same technologies.

A second possibility would be using ODL as a means of allowing target groups to increase their language acquisition. Already, the PUP Open University has collaborated with the Japanese government in an effort to allow OFWs to improve their skills in training centres located abroad. Curiously, however, none of the present ODL institutions seem to offer what are presumably the most basic of survival skills –

language acquisition – despite the century-old track record for teaching languages via correspondence. Improved language use has tremendous spillovers not just for outbound labour, but also for a largely unexploited domestic reading market.

PREPARATION FOR PROFESSIONAL EXAMS

The basic logic of ODL may also be used to improve preparations for professional exams. Here, the problems are manifold: steadily declining passing rates, huge inequalities in access, inferior test construction and a basic lack of convergence in expectations.

Again, ODL cannot be expected to save what is fundamentally a flawed system. But the proposal to create a national testing and evaluation centre, along with concomitant pressure to reform the Professional Regulatory Commission, can be helped significantly by using ODL technology to address specific problems.

Once a commitment to a more rigorous and scientific way of producing test questions is put in place (involving international benchmarks and a number of much-needed improvements cited in Tullao[33]), standardised review modules for the major national exams may be produced. This has the benefit of reducing the overall cost of reviewing by eliminating the need to travel to well-appointed centres (mostly in Manila), and, more importantly, minimising the uncertainty and arbitrariness that plagues the system. The CHED Task Force Report of 1995 records the comments of a number of experts questioning the reliability and validity of board exam questions on the grounds that they test "professional readiness" rather than the quality of instruction received. This may even be a euphemism when set beside recent complaints about how certain books are more preferable to others for the CPA board exams given the replicated test items.

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[33] Tereso S Tullao Jr. "Trade In Services: Implications for CHED and the PRC." *CBE Discussion Paper Serie*s 2000.

These issues are especially important given the likelihood that passing rates for board exams actually *overstate* the degree of instructional quality. Findings that in commerce, only 49% of 61 state institutions offering the programme fielded candidates for the CPA board exam from 1988-1992, or rates of 50% for chemical engineering schools and 9%(!) for mechanical engineering measured for the same category are solid, if not alarming, indications that self-selection is endemic in HEIs. Either institutions do not allow their own graduates to sit for professional exams or graduates themselves do not bother to take them given the low likelihood/expense ratio. Nationalising standards and administering the reviews with the help of ODL can then work two ways: as an important signaling device to HEIs concerning their course content and coverage, and as a quality indicator for the services provided by provincial review centres. Both mechanisms improve the test-construction process by linking those who develop the curricula more closely with those who produce exams and review materials.

Among all the areas thus far discussed, it is in professional certification that the imperative to standardise is probably greatest. The reason for this is the extreme degree of variability in exam results, regardless of whether institutions, regions or courses are used in the taxonomy. On equity grounds alone, this market failure warrants some form of intervention. But more than this, standardisation offers what is in fact a market-friendly policy tool for dismantling what are effectively review centre monopolies (ie those that can lay special claim to past exam questions, close ties with examiners, institutional links to high-pass universities etc) and socially wasteful HEIs (such as those with persistent zero-pass rates). In this sort of reformed policy environment, the use of ODL techniques can prove to be a reasonably quick and inexpensive way of leveling the professional playing field and accelerating the closure of inefficient and under-performing HEIs.

Technical and vocational education: addressing problems of outdated knowledge, a convenient way of co-opting foreign providers, a means of improving the "image" of tech-voc education

The three issues above have been identified by Tullao[34] as the most important problem areas for TESDA. Technical and vocational training is expected to target the following sectors and clientele:

(1) Agriculture and fishery, processed food and beverages, tourism, decorative crafts, gifts, toys and houseware, jewelry, ceramics, metals, furniture and fixtures, garments, construction, communications/IT and electronics, maritime services, land transport, health and other community development services;

(2) Graduates from elementary education who are not pursuing degree courses;

(3) School leavers from secondary education;

(4) School leavers from tertiary education totaling 2.0 million;

(5) Displaced workers;

(6) Indigenous people estimated at 10.8 million

However, the same study by Tullao reveals the following alarming facts: vocational and technical institutions and centres graduate only 9.9% of their clients. Furthermore, there are widespread complaints about the inadequacy of the training (on the supply side) and the general apathy, if not distaste, for this sort of education.

Interestingly, the situation seems to lend itself naturally to the application of ODL. Broadcast-based modules, in particular, show promise in their ability to keep abreast with developments in a given technology. But more than this, channeling the services of foreign ODL providers toward the tech-voc sector reaps benefits as well: firstly by taking advantage of foreign best-practices and frontier technology, secondly by allowing a more rational allocation of ODL service in the education sector (presumably reducing frictions between domestic and foreign providers) and thirdly by helping remove the longstanding "stigma" attached to vocational training.

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[34] Tullao Jr, Tereso S. "Streamlining the Bureaucracy: Updates on the Education Sector. DLSU-Manila. August 1998.

A POLICY FRAMEWORK

All that said, however, the task of mapping out a policy framework for the administration and expansion of ODL programmes in the Philippines remains. We argue here that a national ODL apparatus requires the following reforms to be undertaken:

Creation of a "superbody" to manage ODL across different education sub-sectors

The proposal to establish a coordinating "superbody" is (a) not a new one and (b) not to be construed as a return to the pre-trifocalisation set-up. Instead, it is a sensible response to the imperatives of an emerging ODL environment. This effort may dovetail nicely with recent calls for a more detailed national education agenda (and the consequent formation of a similar agency to oversee this) but the proposal stands well enough on its own. It is to be noted that the one important implication ODL has had for the internal governance of departments and universities is that in all instances it has been necessary to establish a separate college or office to administer distance learning programmes. These bodies often have their own technical and academic staff and are often financially distinct from the departments that would presumably contribute to module production.

In the same way, the demands of a national ODL policy make the establishment of a separate coordinating body perhaps the most important aspect of the framework.

The PCER's proposal for a national higher education coordination body is analogous to this effort. The "trifocalisation" of the education sector into DECS, CHED and TESDA in 1992 has exposed a need for greater coordination among these agencies, as well as a common approach to trans-sectoral issues (such as ODL) and a more harmonised approach to total planning and resource allocation. This leaves considerable scope for the establishment of a national evaluation and testing system. Such an institution, if staffed by proper experts, could take the lead in developing specialised ODL modules for, say, teacher training. It would also serve as the centre to which teaching assessments (say, for

promotion) are eventually sent for more scientific and rigorous evaluation[35]. A possible model could be the United Kingdom's system of having external examiners culled from universities with the highest standards. Institutions have in-house staff members assess papers, but the final say on the results is placed in the hands of the external examiner. It must be said, however, that in practice, the external examiner is little more than a rubber stamp, but with proper direction, this may effectively minimise the practice of "academic in-breeding", whereby the faculty member obtains higher education qualifications from the same institution, and thus gets promoted without effective oversight. In this set-up, the geography-spanning advantages of ODL are once again placed within a more rational and socially-directed reform effort.

This agency should also be tasked with the formation and encouragement of arrangements such as consortia that facilitate the spread of ODL. Consortia can offer many advantages. While a particular mix of services will vary, typical consortia services will include the following:

(a) members may be able to licence instructional materials for lower fees than a single institution would pay;

(b) members may participate in pre-production licence arrangements for multimedia courses that individual institutions could not afford to produce themselves;

(c) members may share the cost of broadcast transmission or the operation of an educational access cable television network;

(d) members may jointly fund a professional to represent them before legislators;

(e) the consortium may apply for grants that would benefit all members; and

(f) individual members might specialise in certain functions needed by all (*eg* researching the latest advances in distance learning technologies, evaluation services, materials duplication, training faculty in the use of technologies etc).

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[35] Already, the Committee has identified four traits of the ideal-type teacher: facility with IT, well-developed reading skills, capacity for creative/analytical/critical thinking, and moral fitness. The possibilities for ODL facilitation are obvious.

Development and institutionalisation of "best-practices" and standards

High on the list of needed reforms to address the current "unplanned" state of ODL is the formulation and development of quality standards not just for instruction and academic materials but administration. Clearly, this task forms part of the rubric of responsibilities assigned to the proposed "superbody".

There are important issues that must be resolved. Should distance education, for instance, be judged by its equivalency to a classroom-based education, or by some other standard? Is that equivalency a given, or something to be proven by research and practice? How can a balance be struck between the need for effective regulation and quality control on the one hand and the encouragement of innovation in the delivery of educational services in hitherto unimagined ways?

To be sure, each institution will address these questions in different ways. What is critical, however, is to assess the quality of ODL administration by using the following available international benchmarks:

(1) **Mission Statement**. The programme has a mission statement that reflects an educational philosophy, goals, purposes, and general intent and that clearly complements the institutional mission;

(2) **Personnel – Faculty and Academic Professionals**. Faculty and academic professionals working in alternative and external degree programmes share a commitment to serve adult learners and have the attitudes, knowledge and skills required to teach, advise, counsel and assist such students;

(3) **Learning Outcomes**. Clearly articulated programmatic learning outcomes frame the comprehensive curriculum as well as specific learning experiences; in developing these outcomes the programme incorporates general student goals;

(4) **Learning Experiences**. The programme is designed to provide diverse learning experiences that respond to the characteristics and contexts of adult learner while meeting established academic standards;

(5) **Assessment of Student Learning**. The assessment of a student's learning is based on the achievement of comprehensive and specific learning outcomes;

(6) **Student Services**. The policies, procedures and practices of the programme take into account the conditions and circumstances of adult learners and promote the success of those students;

(7) **Programme Administration**. The administrative structures and the human, fiscal, and learning resources are sufficient, appropriate, and stable for accomplishing the programme mission;

(8) **Programme Evaluation**. Evaluation of the programme involves faculty, academic professionals, administrators, and students on a continuing, systematic basis to assure quality and standards, and to stimulate programme improvement.

Even more specifically, the agency must make sure that audit mechanisms are likewise focused upon instructional standards, testing and evaluation procedures. A database for tracer studies must be installed and maintained, containing, but not limited to, the following series:

(1) Completion rates (proportion of learners who complete the courses in which they are registered);

(2) Graduation rates (proportion of learners who attain the formal academic credentials which they seek);

(3) Skill development (the degree to which learners develop their independent learning skills so that they take responsibility for their own learning);

(4) Post-graduation performance (performance of the graduates in subsequent education or employment).

Further, such a body would make sure that the following minimum operating standards are in place in every ODL provider to ensure transparency:

(1) An institutional policy to prescribe the duration of study;

(2) A more flexible credit-accreditation policy;

(3) An appropriate policy for choosing faculty, learning materials and course requirements;

(4) A policy for designated contacts between mentor and learner for every course module work;

(5) A policy for regular communication between the learner and the academic programme head;

(6) An institutional policy to maintain a manageable ratio between mentor and learner;

(7) A policy with regard to the application of emerging technologies; and

(8) An institutional policy defining networking schemes with other institutions.

Legislative fine-tuning: definitional issues and coping with foreign providers

PUP-OU's Jessica Dalit[36] highlights a number of issues concerning the emerging legislative framework of ODL in the Philippines. Worth mentioning first is the general policy of demanding ODL application *by all higher education institutions in all programmes and activities sponsored.* While this may be interpreted as the result of a shared optimism about the technological advantages of this mode of delivery coupled

with a desire to produce equitable outcomes, one can only surmise that this policy will not survive any serious attempt to rationalise the higher education sector. Given the pedagogical considerations discussed in **Part I** as well as the sheer inefficiency of the present undirected state of affairs, the last thing any educational reform would want is the indiscriminate expansion of such a programme. Again, a broad and informed social consensus about the purposes of ODL must be the basis for any future legislation. As it is, such a consensus, and thus direction, is sorely lacking.

Also on the docket were concerns raised about access since the wording of CHED Memorandum Order No 27 seemed to limit entry to only "qualified Filipino students…who are unable to pursue higher education through normal and formal channels." Attempts to modify this memorandum (via an circular of updated policies and guidelines) were somewhat helpful in that they removed the objectionable criteria and re-defined ODL instead as a philosophy and commitment to continuous learning, although they merely reinforced the *laissez-faire* and open-ended nature of ODL in the country[37].

There is also the matter of articulating the framework which integrates the formal and non-formal sub-sectors of education more closely. This is a pressing need given the legitimate concerns of social bias against non-formal education and the lack of a well-defined system of granting equivalence.

Over and above this, however, exists the need to correct the imbalances in power specified earlier – such as those that exist between higher education officials tasked with formulating national agendas and legislators whose concerns tend to be more parochial.

The recent moves to liberalise the service sector have raised concerns about the impact of foreign ODL providers, not just upon the state of competition in the higher education sector, but rather upon issues of quality and consumer protection. On this matter, however, both CHED and international rules are strangely silent. As far as APEC is

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[36] Jessica Dalit. "The Policy Context of Open & Distance Learning". *Journal of Open & Distance Learning*. PUP 2000.

[37] "…opening of opportunities by overcoming barriers that result from geographical isolation, personal or work commitments or conventional course structures which have often prevented people from realising their educational goals". (from the text of CHED Memorandum Re: Updated Policies and Guidelines on ODL)

and, in effect, subjecting them to an entirely different set of regulations.   Conceptually, an extension service is similar to the idea of a "satellite" campus.   The foreign provider, though presumably travelling to reach the student via the instructional materials, is still considered as being effectively in the same place as the latter, and therefore not to be covered by current ODL regulations.   The distinction seems to be founded on specious grounds.   At the very least, it would be more socially useful to bring these foreign providers under the umbrella of an ODL "superbody" so that their services can hew more closely to nationally-defined goals, say, the improvement of technical and vocational training.   Under the current system, this is simply not possible.

THE DIFFICULT TASK OF RATIONAL TARGETING

The World Bank's Social Protection Unit has carried out a very important cross-country survey of transitional unemployment and its results were discussed in **Part I**.   A key finding is the inefficiency and costliness of funding re-training strategies to help workers adjust to new market conditions – especially when public money is better spent reducing search costs and providing up-to-date job market information instead.   In Hungary and Mexico, where scientific evaluations exist, findings suggest that public training programmes are generally not effective, but are always more costly compared with alternatives such as preparing *school leavers* for jobs, especially if the economy is buoyant[38].   It is likely that when governments choose to fund re-training programmes, they do so again for equity reasons despite the absence of any follow-on data for

successful job placements. The implication of all of this, then, is that the standard application of ODL as a "safety net" needs to be re-thought.

The more recent literature suggests more rational targeting as a means of maximising the social returns of ODL. This means making ODL programmes more available to those who stand to make the best use of them. Two target groups have been identified. First, there are those workers who are still employed and can use ODL to increase their skill acquisition while at work. Not only will the results be immediate (in the form of increased output), but a serious moral hazard problem may be prevented. We refer, of course, to the frequent insistence of unemployed workers (such as those in the UK) that some form of unemployment insurance be attached to training "attendance", but also to the general lack of job-placement guarantees that has a bearing on subsequent trainee effort.

The Czech Republic experience is likewise instructive. The country has dealt with the problem of a fall in formal sector activity during the transition to market in a relatively innovative manner. A much larger component of the reduction in employment between 1990 and 1995 was countered by pushing or keeping people out of the labour force, and at the same time reducing the incentives to stay unemployed. Training programmes – which have a poor record elsewhere – have been kept small. Instead, the number of new job-seekers was kept temporarily low by increasing enrollments and the length of vocational education programmes.

The experience of the Czech Republic during transition shows that several conditions are critical for the success of this strategy: macroeconomic and labour reforms that encourage private employment, vocational programmes made more general, and the expansion of vocational-technical education by limiting public funding of universities.

Second, there are *those students preparing to enter university education*. While we discuss this more thoroughly in the next section, it is worth mentioning that most experts

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[38] Asian Development Bank. Skills and Change: *A Multi-Country Study of Vocational Education and Training*

agree as to the built-in disadvantage Filipino students face given their fewer years of preparatory schooling. This has generated considerable momentum for the institution of a "pre-baccalaureate" or "bridging" year in which general problem-solving and analytical skills will be properly honed. As the proposal involves considerable out-of-pocket expenses for millions of parents, it is not likely to be approved. A reasonable compromise, however, could be ODL-based training. The proposal would be rational (ie it would serve a clear social purpose), it would benefit from tremendous nationwide economies of scale and would therefore be less costly to implement.

To extend the point about worker (re)training, we emphasise the need to properly assign public and private funding for the development of skills. An efficient way of going about this would be to allow the state to fund training in lower-level (*ie* more basic) technical skills, whose benefits may be appropriated by firms in general (language, computer, secretarial skills). The learning externality involved means that individual firms will have less incentive to pay for worker training when others may benefit from the same workers moving on – thus the justification for public funding in the form of levy-grant schemes, tax credits or straightforward training subsidies. Commercial skills, on the other hand (*ie* those which are firm-specific – techniques in operating machinery, for instance) are best answered for by the firms. With this division of labour, ODL does not become merely a technical solution to the problem of access, but takes an active role in the rationalisation of higher education as well as the effort to increase overall labour productivity. ✸

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