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TEACHER POLICIES IN THE ASIA PACIFIC
AND OTHER REGIONS:
A REVIEW

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INTRODUCTION

• The review provides a comparative picture of current developments in the area of teacher policy, with reference to the Asia Pacific Region (APR). The review also includes evidence from key international sources outside the APR, which form a useful backdrop to future directions that could be taken by governments and other bodies representing certain APR countries.

• The review is divided into eight sections reflecting the theme of the Regional Seminar, as well the emergence of recurring issues affecting the formulation and implementation of teacher policy.

• The sections deal with the following areas (1) The dynamics teacher policy making,(2)Economic investment and quality education,(3) Structures and training,(4) Continuous teacher development CTD,(5) Public service employment and Conditions of employment,(6) Teacher recruitment, attraction and retention, (7) Policy research and development,(8) Special issues which include gender and teacher policy, leadership and teacher deployment.

THE DYNAMICS OF TEACHER POLICY MAKING

• In the section on the dynamics of teacher policy making, three recurring issues emerge from the literature; control of teacher policy, policy analysis-development-implementation and, teacher policy and changing contexts.

• The control of teacher policy resides ultimately with central governments, but there are increasing concerns about who and where the key policies need to be made, and the extent to which those implementing policy should be involved.
• The use of simple methods of policy analysis applied readily to available data, can enable a variety of important policy issues to be treated. There is a shift away from inputs alone to policy outcomes that will hopefully improve teacher policy.

• One of the main features about the changing contexts within which teacher policy is formulated, is the need to engage more teachers in policy development and provide a sense of “ownership” in the process.

ECONOMIC INVESTMENT AND QUALITY EDUCATION

• In reviewing the literature on economic investment and teacher policy, there is a recognition of the importance of educational quality and the impact teachers make on the attainment of quality education. However, World Bank policies on this subject have been met with considerable criticism.

• Three issues were discussed in this section, the relationship between Economic growth and quality education, Teacher policy and investing in teachers and the Implications for education investment. A common theme which emerged, is that investment in education needs to address structural change which will have far reaching implications for future teacher policy.

STRUCTURES AND TRAINING

• Examination of present day Initial Teacher Education (ITE) Structures and training, and any future changes that teacher policy will need to address, revealed four main issues. These were; Fragmentation, The changing locus of ITE and training, Teacher education structures and changes to the training curriculum and Teacher induction.
• In many APR countries there are multifarious forms of teacher preparation, and for in-service provision the situation is even more fragmented. Teacher policies need to address this complex situation as it raises serious barriers to introducing reform of teacher education. Teacher policy should therefore aim at developing a more “joined up” strategy between the various providers of teacher education and training.

• The locus of ITE has been changing gradually over the last decade in APR countries, moving from government teacher training colleges to universities and other tertiary institutions. Teacher policy should build on these developments by ensuring that the balance between academic content, pedagogy and sound classroom practice is maintained.

• It is crucial that manageable partnerships between schools and institutions that prepare teachers are effectively organised, so that successful training outcomes are achieved.

• Teacher policy should examine the various forms of partnership for ITE and In-service provision that improve teacher quality. Some countries in APR already have policies which encourage intra-regional and extra-regional twinning arrangements, which appear to have an enriching affect on teacher development.

• The practicum is clearly a key element in teacher preparation, data from both APR and OECD countries, show there are considerable differences between countries when examining the percentage of time spent on school practice. But research from some APR countries, show that it is not the amount of time spent on the practicum that matters, but the quality of the tasks set and the supervision trainees receive.

• “Blanket” support for induction and in-service education is being questioned in many APR countries, especially in the richer countries. Quality assurance strategies are being implemented during the induction
phase with a strong emphasis on mentoring of novice teachers. In some countries, successfully completed induction is a pre-requisite for certification as professional teachers.

- The notion of making teacher education a continuous and lifelong continuum, appears to be underpinned by national, regional and wider international efforts to improve teacher effectiveness. Such a structural change would have major implications for teacher policy in the APR.

CONTINUOUS TEACHER DEVELOPMENT (CTD)

- Reviewing the area of Continuous Teacher Development (CTD), four issues emerged for examination and analysis these included; Efficacy of existing in-service programmes, moving towards CTD, capacity building as part of CTD and a critique of the value of CTD programmes.

- Following on from the perception of teacher education as a continuum and a lifelong professional goal, the review shows a growing dissatisfaction in a number of APR countries with the present organisation and content of existing in-service courses.

- There is often a lack of new ideas about class management, the use of action research, innovative staff assessment and evaluation.

- There is an over-emphasis on the remedial and compensatory nature of in-service programmes.

- The ideas behind successful CTD should not be confined to teachers, but teacher educators, school inspectors and principals should also be included.

- Capacity building is increasingly being associated with CTD especially in the area of ICT and other classroom technologies.
• Some ICT Capacity building models have suggested a three stage process might be useful, including an initial stage, a retraining stage and an upgrading stage.

• Education economists have criticised both the costs and time spent on the excessive provision of INSET, suggesting that better planning and priorities setting would more beneficial.

• However, in many countries CTD is perceived as an essential opportunity to align teacher needs in exploring new ideas and current developments in educational practice.

PUBLIC SERVICE EMPLOYMENT AND CONDITIONS OF EMPLOYMENT

• As most teachers in the APR are employed by government (with a slowly increasing stake by the private sector), the “career based” model is the dominant model as opposed to the “position based” model. Both models are related to public service employment and address conditions of employment.

• It emerges that conditions of employment are defined by government and teacher unions, with the latter having less say in the APR countries.

• The career “based model” has been criticised for a reluctance to act, when it comes to dismissal on the grounds of poor teacher competency and other disciplinary matters. This appears to be a trend in countries of the APR and OECD countries and is seen to undermine teacher status and professionalism.
Policies relating to teacher recruitment, attraction and retention need to view these three key processes as a continuum of stages which ultimately ensures continuous and effective teacher development (CTD).

**TEACHER RECRUITMENT, ATTRACTION AND RETENTION**

- Teacher recruitment is affected by certain features of the teacher labour market which policy makers need to bear in mind, these include: *The extent of government control, entry qualifications to teaching, partnership between government and teacher unions, and recruitment procedures.*

- Teacher attraction is a dynamic between issues of quantity and quality. The nature of this dynamic varies extensively between different countries within the APR. So teacher policy decisions will inevitably be country specific.

- There are some common indicators which may provide policy makers with answers to address the problem of attracting the best from the labour market. While “relative salary” is a key indicator, it is by no means the only one, job satisfaction, conducive working conditions and a knowledge that teaching is still viewed with high regard, are also seen to be important, in most APR countries.

- Retention is closely related to issues relating to recruitment and attraction. Turnover rates and attrition are important areas subsumed under retention, but attrition is the more serious for teacher policy, due to the high expense of training and the effects of the “revolving door” syndrome on student achievement.

- Policy makers in the APR need to be aware of the following challenges in order to retain a high quality teacher profession; providing effective CTD after induction, making schools part of “learning communities”,

X
providing a salary system that encourages all teachers to aim at quality performance and finally, improving day to day working conditions.

**POLICY RESEARCH AND DEVELOPMENT**

- Teacher policy needs to be underpinned by an informed research base so that well planned decisions can be made. Two issues emerged in this section of the review; *Linking policy research with Evidence in Education (EIE)*, and *Teacher engagement in policy research and development*.

- Policy makers need to be able to assess the difference between the use of Evidence based Policy Research (EbPR) and Evidence Informed Policy Research (EIPR). The latter is likely to be more suitable for pragmatic policy making.

- The role of “brokerage agencies” in many OECD countries have resulted in successful ventures linking research and education. Brokerage is characterised by a culture of effective goal setting and successful outcomes. APR countries have to date, been slow to embrace brokerage, and this may account for the lack of a comprehensive knowledge data base for policy development.

- Engaging all stakeholders, *including teachers*, in policy formulation and implementation is a growing trend in many OECD countries, who are intent on linking research with policy making. It is argued that by having a “consultative balance” between the stakeholders, the prospects of success for a particular policy is strengthened significantly. It is hoped that more teacher engagement in linking research and policy among APR countries, will become a feature in the not too distant future.

**SPECIAL ISSUES**

Three special issues emerged in the course of the literature search, each relate to the wider field of teacher policy discussed above.
Gender and teacher policy

- Research concerning Pupil Teacher Ratio (PTR) show that APR countries with better teacher supply are seen to have a higher proportion of female teachers. These are usually in the richer APR nations. In the poorer APR countries, the picture is reversed especially in India, PNG and Cambodia, where the numbers of female teachers are well below the 50%. The cause of these disparities appears to be linked to poor female participation in secondary and tertiary education.

- Female gender disparities also exist to a significant degree at the higher levels of school governance and management in many APR countries, with the largest disparities amongst the poorer APR countries.

Leadership

- The changing demands affecting school leadership have been recognised in several APR countries, from the role of achieving planned goals, to inspection, to quality assurance and more recently, to the pursuit of school effectiveness. These demands reflect the challenges that have faced school leaders over the last ten to fifteen years.

- New concepts of leadership are emerging to cope with these changing demands e.g., more aggressive school management strategies, intensive mentoring, evaluating teacher quality and the notion of schools as part of “learning communities”.

- Shared leadership is also a feature being developed in many APR schools. Therefore, teacher policy will need to address these demands in view of the growing shortage of potential quality school leaders that is being experienced in several APR countries, even amongst the richer ones.
• There is a need to develop more mid-range theories into various forms of _principal-ship_, to reflect the cultural contexts with pervade indigenous notions of leadership in APR school systems. This would complement and maybe neutralise in some cases, the influence of western leadership models. Such models do not always adequately address, local concerns.

_Teacher deployment_

• Teacher deployment provides a set of options which assist the balance between supply and demand. In the past, many APR countries, have been successful in deploying teachers as part of multiple shift schools.

• Teacher policy may need to re-examine this alternative, for use in the poorer APR countries to meet teacher shortage, in addition to the evidence that multiple shift schooling does not affect the quality of learning unduly.

• The need to look at how the multiple shift system is designed and implemented is however important, to ensure that the quality of instruction-hours are not impaired. If this option is used for teacher deployment, it is essential that policy implementation addresses the issue of achieving instructional quality.

• Embarking on teacher deployment, policies need to be carefully analysed, as national statistical data do not always reflect conditions “on the ground”.

• The relationship between class size and hours of instruction provide a set of indicators which determine the use of deployment policies. In many APR countries, “trade-offs” between the two indicators have proved to be successful e.g. Cambodia, Bangladesh and Indonesia.

• Other examples of “trade-offs” occur in some of the richer APR countries relating the relationship between _class size, teacher quality and salaries_. As a result of this deployment strategy, the need for more teachers has
decreased, while the level of student achievement appears to remain high e.g. Singapore, Taiwan and Korea.
TEACHER POLICIES IN THE ASIA PACIFIC AND OTHER REGIONS: A REVIEW

INTRODUCTION

In the last two decades there has been an increasing focus on the role of policy makers to tackle a number of key issues and problems associated with teachers, their teaching and their training. The OECD report in 2005 entitled *Teachers Matter* produced a landmark account of the need to improve the quality of teachers, as the most significant and central concern in the overall improvement of efficiency and equity concerning schooling. In a large measure, this improvement can only be achieved by:

“…..ensuring that competent people want to work as teachers, their teaching is of high quality and that all students have access to high quality teaching” (OECD,2005).

The current concern with the teaching force is based on a number of assumptions, the first of which is that the quality of education is closely linked to economic success and secondly, that schooling has a key role in responding to social well being and rising societal expectations (Cochran-Smith 2009). How real these assumptions are has predictably raised both a national and international debate about their merits? What is certain is that organisations such the OECD, World Bank and UNESCO have (and are), supporting regional and national measures to improve teacher quality, recruitment, retention and lifelong teacher development. While such issues have in the past been discussed and addressed with varying levels of success and shortcomings, there is a renewed urgency in the light of the effects of globalisation on social, educational and economic development within nation states. This urgency has manifested itself in such issues as teacher supply and demand, recruitment, teacher preparation, retention and teacher professional development.

This review will attempt to provide a comparative picture of current developments in the area of teacher policy, that reflects the responses by many countries of the Asia Pacific Region (APR) to address the issues and problems highlighted by OECD, and other international bodies. As Morris and Williamson have pointed out, learning about teacher preparation in different countries of itself, does not provide policymakers with ready made solutions,
but it does render valuable insights of existing contexts for policy making in different countries,(Morris&Williamson,200).

The most recent report that impinges on future of Teacher Policy making and its consequences is the Internal Reading Association Report (IRA) prepared for UNESCO Bangkok, entitled the Status of Teacher Education in the Asia Pacific Region (UNESCO 2008). This review will reflect some of the trends, issues and problems that were discussed in the IRA report. The IRA study aimed to provide information on teacher education practices and structures for training teachers in 25 APR countries.

The study also provided data which would be useful for policy makers, researchers, teachers and their professional organisations, to address the issues relating to future visions of teacher education, enabling teacher policies to be both relevant and effective. The study identified common trends which were cross national in nature and it revealed a considerable degree of similarity in what becoming a teacher entails, and how pathways to the teaching profession can be managed.

For instance, there appears to be a degree of commonality with the power which central education authorities have over teacher education. Almost all teacher education is carried out in institutions either in government colleges or universities. There is a “heart felt” desire to provide improved levels of teacher quality, and a marked trend in changing the teaching profession from the image of a static civil service, to one that is innovative and enriched by opportunities of lifelong professional development. The IRA report also identified a number of issues that emerged from the study, these included fragmentation of the infra –structure of teacher education, deployment of teachers, lack of meaningful standards in certification, retention of teachers, diversification of the teacher education workforce, inclusive education, the role of professional organisations and the contribution of research to teaching.

The scope of the present review has in the main, examined literature mainly over the last fifteen years covering the Asia Pacific Region. However, the review also includes sources outside the region such as those listed as members of the OECD. Sources from Latin American and African regions that are responding to raising teacher quality and related issues are also discussed.
In the preparation phase for this review eight areas emerged that appeared to have significance in formulating teacher policy. These areas will shape the structure of the review.

The eight areas are; (1) The Dynamics of teacher policy making, (2) Economic investment and teacher policy, (3) Structures and training, (4) Continuous teacher development (CTD), (5) Public service employment and conditions of employment, (6) Teacher recruitment, attraction and retention, (7) Policy research and development and finally, (8) Special Issues which include Gender and teacher policy, Leadership, and Teacher deployment. The overview will focus on teacher policy as public service employment, but as many countries have an increasing private education sector, reference will be made where appropriate to issues common to both. An executive summary of the review draws together the issues discussed and possible future directions teacher policies may take in the Asia Pacific Region.

1 THE DYNAMICS OF TEACHER POLICY MAKING

Three recurring issues emerged in the literature on the nature and processes of policy making where teacher policy is a central focus. These are identified as follows; (1) Control of teacher policy, (2) Analysis, development and implementation, and (3) Changing contexts. Each will now be discussed below.

1.1 CONTROL OF TEACHER POLICY

It appears that the nation state continues to hold considerable influence in most areas of teacher education policy making, in spite of the efforts made by various international bodies eg EU, OECD, World Bank and UN agencies, to rationalise certain policies. The aim of identifying common goals towards achieving improved teacher quality along a global dimension has been a major focus. A common issue concerning teacher policies is the focus on who and where are key decisions made? (Furlong, Cochran-Smith, Brennen 2009).

To what extent are policies exclusively under government control, or is there a more laissez faire approach by local authorities, and/or higher education using competitive management, the latter being the main providers nowadays of teacher education in many countries? Government policies on the role of competencies in teacher assessment and the drive to improve standards have
produced sharp debates about the professionalism of teachers. The role policy makers have in increasing the commodification of educational provision at pre – university levels which extends into higher education policies, is another indicator of the power of the state in determining education policy for mainly economic reasons.

The international picture of the control of teacher policies varies from a distinctly centralised approach to a more local laissez faire stance. In between these positions are countries that adopt a consensual orientation in both the nature and pace of change e.g. Scotland. In Belgium, the recent decree on Teacher Education Policy aims to bring training institutions into a common framework which is claimed to have a market/entrepreneurial ethos. This has raised questions about the threat to teacher professionalism as a trend away from a “profession-oriented virtues system”, (Simons & Kelechtermans 2009).

In the United Kingdom, the pace of centralisation has intensified since the early 1980s, weakening the influence of universities on teacher education and allowing market oriented forms of practical training to flourish (Furlong et al. 2009). The UK National Partnership Project (NPP), reaches down to the school level, strengthening the role of government and its control over teacher policy making.

In Australia, according to Brennan and Willis there is a policy squeeze between federal and state interests, as all four hundred Teacher Education Programmes are located in universities which are financed by the Federal Government. This inevitably brings tensions between central and local authorities when it comes to addressing policies for improving teacher effectiveness (Brennan & Willis 2009). In Singapore, arguably one of the most centralised systems of teacher policy anywhere in the world, the city state has introduced a policy of “Thinking Schools” to broaden the role of schools to meet global demands. (Hogan & Gopinathan 2009). However, it appears that classroom pedagogy continues to remain a “traditional” affair lacking sufficient initiatives and creative strategies to meet the growing need for teachers to be more innovative.

It is not only in Singapore that teachers and the pedagogies they employ are a focus of central policy making. In both Fiji and Namibia there are also similar
trends albeit in different facets of teacher-learner interaction. In Fiji for instance, policies for improving pedagogy by making it more child centred, conflicts with traditional values, such as the respect and obedience for authority, which are also related to the colonial legacy that reinforced these cultural values albeit for other reasons (Tuinnamuana 2009). This reflects the Freireian concept of “banking education” where reflexive approaches to teaching are “drowned out” out by the prevailing techno-rationalistic teaching strategies used by teachers.

A similar story emanates from Namibia where the work of Zeichner and Ndimande describe a “tussle” between a more technicist as opposed to a more reflective approach to teaching. World Bank policy makers have attempted to underline the importance of the reflective approach, but it seems Namibian policy makers are still not convinced of its merits (Zeichner, K & Ndimande, B. 2009). Turning to the USA and in contrast to what has been discussed above, there is a drive to develop a more national system of teacher education, which according to Cochran-Smith is powered not so much for the “public good”, but for concerns about the future of the American economy and the role teacher preparation needs to play in its success. This has resulted in an “unfocussed mess” which has made teacher policy making incoherent (Cochran-Smith. M. 2009).

1.2 POLICY ANALYSIS, DEVELOPMENT AND IMPLEMENTATION

It is the function of policy makers to provide a vision and a strategy for educational development, mobilising support and cooperation for implementation. The key players are government, non-government agencies specifically linked to the education sector, teachers, schools, school administrators, students, parents and the community. In countries such as the United Kingdom and Sweden, industrial and commercial sectors are also seen as having much to offer by way of expertise and financial backing. This however makes decision taking problematical. The issue of “trade-offs” between these parties need to be managed with careful insights and should be a key mission for key decision makers, who will be ultimately responsible for effective teacher policies.
The use of simple methods of analysis that is applied to readily available data, can enable a variety of important policy issues to be treated, analysed and eventually implemented. It is the role of policy analysis to ease the job of policy makers, providing sound and significant decisions about policy discussions e.g teacher retention, the introduction of multi-grade schools etc. The value of policy analysis will hopefully improve the factual knowledge about teacher policies and the constraints in the system, so minimising the effect of potential flaws in policy implementation. This should lead to consensus in situations where both policy making and its implementation is inherently difficult and often controversial. The nature of a priori views held by participants and vested interests will always be a challenge for policy making and its implementation. It is therefore necessary that both empirical and other forms of evidence are available to make sound judgements for teacher policies to be enacted fairly and effectively.

According to Mingat and Tan, if the above is successfully resolved it should ease the process of policy implementation by reducing the scope to reach a conclusion (Mingat & Tan 2003). The demand for policy relevant work is increasing worldwide and coincides with a shift away from inputs alone, to policy outcomes, as this appears to be consistent with the concern about investing in education in general, and in improving teacher policies in particular. Furthermore, Mingat and Tan state there are two factors that matter when investing in education a) schooling outcomes and b) efficiency. They provide a useful and practical approach of how policy analysis can be tackled, by identifying a number of procedures that could be applied in analysing a particular a teacher policy decision. These include; diagnosis of structural weaknesses, cost analysis and cost effectiveness, management of teacher deployment and classroom processes, assessing policy options for training and pay, examining equity issues such as policies for girls’ schooling and the value of conducting comparative policy analysis.

1.3  

**TEACHER POLICY AND CHANGING CONTEXTS.**

Teacher policy is a complex, changing, and often a controversial area involving analysis, implementation and development. The work of Mingat and Tan draws
attention to the economic analysis of teacher policy making and its role in implementing policy. Although economics play a crucial part of any policy making process, other factors are equally salient in the formulation and development of teacher policy. For instance, engaging more teachers in the development and implementation of teacher policies has not only surfaced in the last decade, but is now actively advocated by agencies such as the World Bank, UNESCO and OECD. The sense of “ownership” which teacher engagement engenders has been shown to be essential in producing effective, relevant and long lasting teacher policies. Evidence from Chile (Avalos 2000) Italy, Hungary, Ireland, Spain and Sweden (OECD 2005), has shown how important it is to engage those working on the “coal face” when changes in teacher policy are anticipated.

The lead of teacher organisations is particularly important in effecting teacher management patterns (OECD 2005), and the role of General Teaching Councils, in countries where they exist, provide a valuable forum for debate and policy development especially when implementation has been achieved. It has been shown by the OECD study “Teachers Matter” that implementing policy which involves teachers on a continuous basis, as opposed to “contrived collegiality” (Hargreaves 2003) is likely to be much more beneficial. This is especially the case within a framework of “learning communities”, where teachers get together to analyse their own teaching in the light of policy changes to classroom practice.

The need for teachers to be engaged more actively in policy making is not the only element in the changing context of teacher policy. OECD has in its publication Education Today, raised several issues that reflect the changing context of education relating to both social and economic determinants. Among the issues discussed is the relationship between of equity and efficiency in the provision of education across many of countries (OECD 2009a). It is interesting to find that there is no contradiction between equity and efficiency, when it was previously argued that redistribution of resources to those in greater need helps equity but damages efficiency (World Bank 2007, OECD 2006). It appears that for these organisations, reasonably-priced effective measures to address failure benefits both efficiency and equity.
Another facet of the changing context to policy making is that of Gender. It is acknowledged that the education of girls and women has increased significantly over the last decade (OECD 2009b), (UNESCO 2008), (UNGEI 2008), however the picture is patchy. As much as 22 out of 24 OECD countries indicate that female graduation rates from secondary school surpass those of their male counterparts, which could mean a re-focusing of teacher policy to address the causes of male underachievement? On the other hand, the EFA Global Monitoring Report in 2008 presents a mixed picture of progress towards achieving gender- related goals by 2015 for many poor countries in Africa and Asia (UNESCO 2008a).

The task of achieving gender equality is far from complete and as the UNGEI report points out, the challenge of “hard-to-reach” girls remaining excluded from schooling is a priority. Ensuring that these girls complete primary education and move up the education ladder as boys do, will remain a key teacher policy for the foreseeable future. This will require a sound understanding of the complex nature of changing contexts, and how it influences the design and implementation of innovative strategies, so that they can feed into effective teacher policies.

2 ECONOMIC INVESTMENT AND TEACHER POLICY

If teacher policy is to be effectively implemented in any country, the level of financial investment will need to underpin most decisions to make those policies work, so that they have a lasting impact of producing a high quality teacher labour force. For most emerging economies, the World Bank has provided substantial financial assistance in the form of low interest loans over the last five decades. However, other international organisations such as the European Union, Asian Development Bank (ADB 2003, Loxley 2004), have also been prominent in contributing financial assistance to the poorer countries in their spheres of influence. In this section we will review the recent sources of evidence which throw light on the relationship between economic investment and teacher policy. Three areas will be discussed these are (1) Economic Growth and Quality Education, (2) Teacher Policy and Investing in Teachers and, (3) Implications for Education Investment.
2.1 ECONOMIC GROWTH AND QUALITY EDUCATION

The World Bank launched a new study on the Role of Education Quality in Economic Growth in June 2008, which recognised the importance of educational quality and the impact teachers make towards the attainment of quality education (Hanushek&Woessman2008). In the study, the authors state that the role of improved schooling, a central part of most development strategies, has become controversial, as the expansion of school attainment has not guaranteed improved economic conditions. The authors claim that there is strong evidence that the cognitive skills of the population, rather than mere school attainment, are more powerfully related to individual earnings and to the distribution of income and economic growth in general. They also go on to say that new empirical evidence shows the importance of both minimal and high level cognitive skills. They also underline the robustness of the relationship between acquisition of relevant cognitive skills and economic growth. It appears from World Bank research, that international comparisons which use expanded data sets on cognitive skills, show large deficits in developing countries where data is derived only from school enrolment and attainment. The effect of this is likely to mean that closing the economic gap will require major structural changes in schools.

2.2 TEACHER POLICY AND INVESTING IN TEACHERS

In the light of the recent World Bank study assuming its findings are valid and acceptable, the implications for teacher policy would be far reaching especially when it comes to addressing the issues associated with “major structural changes”. From other World Bank reports on the subject of Education Quality and Economic Growth, it seems that much attention is focused on encouraging testing and competition, which in turn can be linked to performance related teachers’ pay and also that of school principals (World Bank 2005,2007). Hanushek and Woesman define educational quality as “... ensuring that students learn” and they continue with the argument that
students should acquire cognitive skills, because it is these are skills that contribute most effectively to individual earnings.

Critics of Hanushek and Woesman’s view of quality have argued that while cognitive skills are clearly important, they are not the only ones that matter when defining educational quality. Knowledge, attitudes and life skills are also part of quality as expressed in responsible citizenship, tolerance and having democratic values. Artistic expression and sport, drawing and dance are all part of a rounded education which schools should also strive to develop in their students. It is claimed that these other cognitive abilities can also contribute to economic growth and provide another avenue to individual earnings. (Educational International 2008).

The World Bank study proposes three main measures for improving educational quality; choice and competition, decentralisation and autonomy and accountability of outcomes. If these measures were adopted in part or in total by many countries of the Asia Pacific Region, there would have to be a major shift away from existing policies. Again critics have challenged these measures from the standpoint that choice and competition, does not necessarily lead to better quality, it may result in improvements in higher scores but that is only a part of what schooling is about. Measures to decentralise and encourage autonomy are moves in a positive direction, but unless these measures are well planned and coordinated, they could result in serious outcomes as took place in Zambia and Tanzania, where decentralisation resulted in long delays in the payment of teachers’ salaries. In Poland, decentralisation lead to the closure of early childhood education and care services due to the lack of money and political will. On the measure of accountability of outcomes, critics have pointed out that an over-emphasis on examinations and performance-related pay can lead to difficulties in policy implementation and perhaps more seriously, provide students with a narrow educational experience during their schools years.

2.3        IMPLICATIONS FOR EDUCATION INVESTMENT

So far we have examined the recent role of the World Bank in examining how education promotes economic well-being with particular emphasis on the place of educational quality. Their findings are likely to have important
implications for teacher policy making in countries of the Asia-Pacific Region if they are taken on board. This will particularly affect teacher training, the school curriculum, conditions of service and the professional development of teachers. In OECD countries, the relationship between teacher policy and economic factors have concentrated on improving teacher quality, giving wider access to tertiary education and the reform of teacher education and training. OECD countries have already achieved universal primary and secondary education, as well as having an established tertiary sector for many years, albeit highly selective.

Investment into schooling over the last 15 years in all OECD countries has resulted in only a minority of students who do not complete compulsory education. Spending on schooling, accounts for over 2/3rds of total expenditure and spending per student has increased in all OECD countries since the mid 1990s (OECD 2008). The picture of the investment made in teachers, as indicated by teacher salary levels, has gone up in real terms over the past decade (OECD 2008). In the area of teacher aspiration, intrinsic motivation can be capitalised on with teachers who remain in service by making use of extrinsic motivators such as performance related pay and special allowances where extra duties are undertaken by successful staff (OECD, 2006). There has also been a rapid investment in IT at the classroom level and its use to improve educational organisation and management (OECD 2004). It remains to be seen whether the poorer APR countries will be able to make changes to teacher policy along the lines taken by OECD countries. However, whether such changes would be perceived as desirable in the first place is another issue.

3 STRUCTURES AND TRAINING

This section of the review will examine both the present status and possible future changes to Initial Teacher Education (ITE) and Teacher Induction. Four areas will be discussed,(1) Fragmentation of teacher education structures ,(2)The changing locus of ITE and training, (3)Teacher education structures and the training curriculum and (4)Teacher induction.

3.1 FRAGMENTATION OF TEACHER EDUCATION STRUCTURES
The IRA Study of 25 APR countries identified the multifarious ways in which each country has elaborate schemes for the preparation of the teaching force. These included ministries of education, national institutes for education, curriculum centres and training institutes of higher education. The situation for the providers of in-service education was even more fragmented with responsibilities dispersed amongst regional service providers, NGOs, teacher centres, colleges and universities and other teacher education institutions. This fragmentation raises challenges when introducing change and reform into the teaching force.

The fragmentation between initial training and in-service providers may mean that university faculties responsible for the initial training, have no interaction with teachers once they have entered employment. On the other hand, in-service teacher centres are likely to be cut off from access to current research, as well as funding to develop small scale projects at school level. Where there is a trend away from central control, the relationship between providers will become more problematic, as there would be a lack of coordination between those who provide the medium to long term development of the teaching force. Studies that explore the inter-relationships between various providers would prove valuable were they to assess the benefits using a more “joined up” approach to teacher education.

While the issue of fragmentation appears to be one of the key concerns amongst many countries of the APR, the picture from the OECD countries is more positive. Delannoy, a senior operations officer at the World Bank as far back as 2000 perceived promising responses to making teacher training a lifelong endeavour (Delannoy 2000). He was referring to the challenges that faced those OECD countries that wanted to improve teacher quality, by focusing on the long term education of teachers as an answer to the quality problem. The idea of a continuum or long term professional education is not new, the idea was put forward by the author in the 1990s in which the various phases of a teacher educators’ professional development could be seen as part of a wider partnership between providers Thomas (1993). So the concept of an unbroken continuum could equally apply to both teachers and teacher educators. However, establishing teacher policies which would embrace the notion of a continuum, would have implications for restructuring the existing
systems of ITE and in-service training in countries where financial resources are limited, and where attitudes to changing the status quo may be a barrier.

3.2 **THE CHANGING THE LOCUS OF ITE AND TRAINING**

In many countries the locus in Initial training has tended to shift with the changing nature of teaching and the teacher's role. All teachers in most OECD countries are now trained in universities with postgraduate professional training for those students who read for degrees other than in Education as a subject. On average, students taking an Education/Teaching degree, have a minimum of 3 years training, while 5 year programmes and intensive internships for one year or more is becoming the norm.

In the APR there is also a move to upgrade existing Teacher Training Institutes (TTIs) or Normal Schools into tertiary level institutions as in Malaysia and The Philippines, or to create a National Institute of Education which lies within in the tertiary sector as in Singapore. Suzuki and Howe have discussed the issue of providing trainees and acting teachers with appropriate programmes which should emphasise the professional capabilities of teachers in East Asian countries. They report that Taiwan, China and Korea are countries where universities and colleges have amalgamated into comprehensive university complexes, where all students are registered as candidates for the teaching profession (Suzuki & Howe, 2010).

However, by incorporating ITE too closely into the university sector to elevate academic standards there is a risk of producing teachers who may not “connect” with school needs when they enter fulltime teaching. To address this concern, links between schools and university training faculties change the nature of the relationship so that there is a better “connect”. Another aspect of the changing locus of ITE has been the advent of partnerships as discussed by Thomas. Partnerships come in different forms, but in general they are developed to improve training by making it more relevant to the school where teachers will ultimately work (Thomas 1996, 2003). Partnerships can be between schools and sectors such as industry, commerce and community centres which it is hoped will widen the experience of trainee teachers, and
ultimately the quality of the teaching force. ITE which is associated with such school partnerships could also be seen as a means of enriching teacher preparation.

While such partnerships are not common in the poorer members of the APR, they are becoming more common within the richer members. In Malaysia, Thailand and to a lesser extent in Singapore, partnership in teacher education is common at an international level, where there are both training, accreditation and research links with American, Australian, Canadian and UK universities at undergraduate and postgraduate levels. In Malaysia, partnerships are used as a means of addressing a quantitative issue due to an insufficient numbers of higher education student places. In other countries like Thailand, the use of partnership is used to improve the quality of education and training mainly at the postgraduate levels.

3.3 TEACHER EDUCATION STRUCTURES AND THE TRAINING CURRICULUM

Initial Teacher Education (ITE) curriculum and pedagogy has had to respond to changing societal demands, so courses need to instil in their students the ability to motivate and continue learning throughout their career. The integration of academic content and didactics figures highly in teacher policies within the training curriculum, especially with the nature and length of the practicum becoming a major focus to strengthen teacher effectiveness in the classroom.

Trainee teachers should not only consider themselves as instructors but an integral part of an “interactive learning” process involving their students. The notion of “interactive learning” should a key objective of any effective ITE programme. A study by Ryan et al in Australia took a “reality check” on the way pre-service teachers expanded their views on pedagogy and diversity during their practicum. Using a Butlin conceptual framework, the study showed how trainees were actively involved with the realities of performing as learners and as teachers. The researchers concluded that over the four year training period, the trainee teachers were able to develop a better understanding of pedagogy.
in different contexts, in which there were wide differences in learner understanding (Ryan et al. 2009).

For most OECD countries, the percentage of time spent on the practicum is about 25% while in the UK it varies between 50% - 90%, the latter case is in line with UK government policy to make teacher education a more “on the job” form of training at both primary and secondary school levels. But as the research from Australia shows it is not the time devoted to the practicum that is at issue but the quality of the tasks that are set.

The OECD has recognised that a high quality of Initial Teacher Education (ITE) is necessary but not a sufficient case for on-going teacher effectiveness (OECD 2004). The demands on schools are not only increasing but changing very rapidly e.g. advances in knowledge, and electronic access to that knowledge in particular. Furthermore, new ideas and innovative practices in pedagogy have increased the range of choices that teachers are able to employ in their teaching.

The increased pressure for teachers’ roles to include more social, pastoral, managerial and career advisory responsibilities, have also become factors in what is expected of teachers when they enter employment. In the light of these demands, existing ITE structures used in most OECD countries and a growing number of those in the APR, are recognising that these structures are no longer able to meet demand. The idea of viewing a teaching career as a continuum is increasingly seen as the way forward resulting from the pressures made on ITE. A typical structure of a continuum would consist of three phases, firstly the ITE phase, secondly the induction phase, and thirdly, a longer professional development phase. Induction will now be considered, leaving section 4 of the review to examine professional development.

3.4 TEACHER INDUCTION

Induction is a key stage in the entry to the teaching profession and can be a traumatic moment for the young teacher in his/her first posting. It is often at the induction stage, that dropout is triggered due to cynicism, discouragement and poorly planned induction programmes. In the APR, there have been
impressive moves to counteract this. Institutionalised processes of induction using experienced school mentors to monitor beginning teachers are evident in Singapore, (Thomas, et al 2001), Malaysia, Thailand and other APR countries. In most cases, a contractual agreement provides for adequate time and resources as well as structured learning opportunities, so that inductees reach agreed professional goals.

In some APR countries e.g Singapore, satisfactory completion is a condition for teacher certification. Induction using a mentoring system is an extended “on the job” training during which the beginning teachers are paid. This provides a key incentive to improve teacher quality and build up motivation with the ultimate goal of attaining certified teacher status (Thomas 2001). A study from New Zealand on a quality of induction project and supported by the New Zealand Teachers’ Council found that Provisionally Registered Teachers (PRTs) who had access to family, community as well college support in Maori schools, provided an interesting form of induction. Practices such as these not only produce better teaching and a smoother transition from ITE to a teacher’s post training period, but a valuable social awareness of the backgrounds of students they are likely to teach in the future (Piggot-Irvine et al 2009).

Policy makers are moving away from providing “blanket” support to induction and in service professional development, to issues about the nature of induction and the kinds of in-service education which follows it. Furthermore, how all teachers, and not just the most motivated, can be encouraged to continue and develop their professionalism. Induction also has a key role in the attraction and retention of teachers, as even those countries with rigorous ITE programmes recognise, that new teachers need extensive support and “on the job” learning. Poor induction programmes may have a “make or break” effect on teacher retention.

Research has shown that new teachers struggle with problems such as class management, assessing student work, motivating students to learn, interacting with colleagues and communicating with parents. In Japan, Switzerland and the USA “special induction “programmes are being developed. Mentoring is a key element in the Japanese induction process. In Switzerland, Heinz Rhyn, who directs the department for Quality Assurance, has installed induction
programmes for novice teachers that must be successfully completed before the inductees are certified as professional teachers. In the USA, Peer assistance and Review Programmes operate under joint agreements between unions and school districts in cities such as Cincinnati, Columbus and Ohio (Schwartz, Wurtzel, Olson 2007), (OECD 2007).

Teacher Education and certification frameworks are also coming under more scrutiny as a result of the changing roles of teachers. As has been mentioned above, the range of tasks teachers are seen to be responsible for has widened significantly. As a consequence, many countries see the need to revise the structures of teacher education and training accordingly. The development of job profiles and core responsibilities has shown that new areas of teacher education have emerged such as teaching in multicultural classrooms, integrating students with special needs, advising parents, working in teams and being part of a learning community. ITE and Induction stages therefore, can only provide a start to tackling the demands of a changing profession (OECD 2004). Therefore, the need for teacher policies that emphasise the importance of continuous professional teacher development (phase 3) becomes paramount and a key policy priority. It is to the issue of continuous teacher development that we now turn.

4 CONTINUOUS TEACHER DEVELOPMENT (CTD)

In this section of the review, four areas of teacher development will be discussed these are as follows: (1)Efficacy of existing in-service programmes (2)Moving towards continuous teacher development (3)Capacity building as part of CTD (4)The value of CTD programmes – a critique

4.1 EFFICACY OF EXISTING IN-SERVICE PROGRAMMES

Many of the poorer countries in the APR have teacher education programmes that only prepare teachers, yet the workforce has a range of professionals including master teachers, mentoring staff, teacher coaches, teacher auxiliaries and other paraprofessionals which provide considerable diversity. An issue raised in the IRA Report concerning this issue of diversity within the teacher workforce, refers to the extent to which the processes of teacher education
can cater for such a diverse group of professionals (UNESCO 2008). This issue is pertinent to the provision of in-service education, as it is the natural stage where the teacher workforce have the opportunities to receive further education and training, in the knowledge and skills that are necessary for their further development as practitioners. In many instances where in-service provision is offered, it tends to be remedial and mainly compensatory in nature, rather than introducing new ideas and principles and higher order skills.

In-service education should expand the capacities of qualified teachers and other sections of the workforce in techniques like action research, diagnostic pedagogy, peer mentoring, improving management, social and pastoral skills. It is therefore necessary, to make the issue of continuous teacher development a key policy commitment, for it is at the crux of improving teacher effectiveness and therefore teacher quality. ITE and Induction stages can only meet the basic needs of the beginning teacher, while continuous teacher development will be the ultimate answer to providing good quality teachers in the long run.

4.2 MOVING TOWARDS CONTINUOUS TEACHER DEVELOPMENT

The OECD has argued that teacher development be continuous and manifested as a “lifelong” professional process, ensuring that a consistent level of quality is pursued and maintained for as long as possible during a teacher’s career. In other words, teaching should be to be perceived as a “lifelong profession” and this begs the question for policy makers as to what kinds of in-service provision should be made available? It is clear that the findings and conclusions of the OECD study “Teachers Matter”, reflects what has been discussed above about the notion of teacher development as a continuum, which also applies equally to the APR countries, as it does to those within the OECD and other regions of the world (OECD 2005).

The ultimate aims of continuous teacher development are to provide a teaching force with a shared vision to improve the balance between pedagogy and knowledge, to encourage teacher reflection about practice, as well as furthering new knowledge and skills to meet the challenges of a changing world. In achieving these aims, the personal development of teachers would
also benefit their effectiveness as teachers. Thomas has expressed this sentiment about a continuum from his work in Africa and SE Asia, as has Avalos in Latin America. Avalos sees a continuum model as a sustaining force for successful professional teacher development which will ultimately provide sound opportunities for teacher career pathways, (Thomas 1993, Avalos 200). In a recent review from Malaysia, provision of quality secondary education relating to training and retaining quality teachers was examined in some depth. It was reported that there is an urgent need to seriously consider more continuous models for teacher professional development. They also add that this area should be part of teacher policy and implemented as soon as practicable (Mokshein, Ahmad & Vongalis-Macrow 2009). It would seem that teacher policy which addresses only serving teachers’ needs in this area, could also consider teacher educators, inspectors, advisors who conduct CTD courses and equally need opportunities for their own upgrading as well.

4.3 CAPACITY BUILDING AS PART OF CTD

Capacity building is becoming increasingly associated with the professional development of teachers, and nowhere more evident is this than developing long term capacity building for integrating ICT into education. The work of Russell et al argue that there should be a closer coordination between those involved in ITE and In-service Education (Russell et al 2003). Other workers such as Carlson & Gadio et al and Haddad et al, have develop a framework for ICT integration as part of a “lifelong professional preparedness” which is closely reminiscent of the continuum model discussed earlier. Three stages are outlined in their model; Initial preparation or pre-service stage, a Retraining and upgrading stage and a Continuous teacher support stage (Carlson & Gadio 2002, Haddad & Draxler 2002).

The work of these authors especially that of Russell et al, also include teacher educators in integrating ICT into the professional development process. Capacity building linked to professional development has also been the focus of UNESCO research and training workshops and particularly in the area of ICT (UNESCO, 2004, 2005, 2008b). In a paper which deals with ICT integration and capacity building in education, Ng et al have argued that including ICT as part of the link between capacity building and teacher professional development,
where teachers are empowered not just to implement but also *lead* educational innovations, would transform schools and their impact on society (Ng, et al 2009).

### 4.4 THE VALUE OF CTD PROGRAMMES – A CRITIQUE

A cautionary view about the effectiveness of professional training for making better quality teachers, has been voiced by those who examine the relationship between the *time and money* spent on excessive provision of in-service professional development programmes. It has been argued that the more professional training a teacher receives over a career, will not necessarily result in greater measures of teacher effectiveness. A key advocate supporting this cautionary approach is Hanushek who is a prominent economist at the World Bank. In publications stretching back over 20 years, Hanushek (1986, 1994, 1999, 2004) argues that there is very little relationship between characteristics such as student performance and the duration of education and training, to equate with significantly high levels of teacher quality. While Hanushek’s position relates to student outcomes which has been challenged by Santiago, much of Hanushek’s views have may have relevance to planning teacher development programmes (Santiago 2004).

Teacher characteristics that only measure qualifications, length of experience and attendance at in-service courses are insufficient in themselves. If the value of attending in-service courses to gain experience and a certificate is the main indicator, then it would give Hanushek’s position some validity. It would be more useful to identify specific indicators that would provide in-service professional development with outcomes resulting in improved teacher quality. For instance, outcomes such as teachers having the ability to communicate ideas with clarity, to engage classes actively in learning and to stimulate creativity and innovativeness would provide some of the competencies that have been shown to improve the quality of teaching.

While there are professional development courses that concentrate on such competencies, they are often “one off” events. The effectiveness of well planned continuous development rests with imaginative teacher educators and master teachers to deliver quality programmes. In addition, teachers need to be made more proactive developing a sense of commitment to their future
as teachers. It is important that all teachers feel they are totally involved in what courses they take, so that they have a sense of ownership of their future career prospects.

It appears that in ITE and professional development programmes, there is a lack of emphasis on developing harder to measure teacher competencies, as outlined the previous paragraph. Gannicot (2009) suggests that some programmes for up-grading teachers through in-service professional development may have limited effects, and while the Singaporean experience provides more focused and well managed teacher development programmes, the experience from Korea suggest that many up-grading programmes are fragmented and unrelated to practical teaching. Another finding is that much is left for the teacher to decide which professional course he or she wishes to pursue (OECD 2005). Maybe more teacher advice and support from school principals would be beneficial here?

From the discussion so far, it seems that there are mixed effects to the role of professional development courses whose ultimate goal is to improve teacher quality. There are those who advocate the position that only by raising the quality of people to who enter the teaching profession, will high levels of teacher quality be achieved (McKinsey and Company 2007, Gannicot2009), and that professional development and upgrading programmes have only a limited effect especially for those teachers with poor qualifications entering the profession. However, CTD is seen by many countries as an opportunity to align teacher profiles with performance of school needs, and to make school based professional development (amongst other alternatives), a locus to promote successful programmes, such as action research training from which classroom based research projects can be initiated.

The development of a relatively new discipline namely Education for Sustainable Development (ESD) is a subject of current interest in teacher education, throughout the APR (UNESCO 2007). At present, in a growing number of APR countries strategies are being developed to integrate ESD into selected curriculum subjects eg science, geography. ESD appears to be a pertinent area for a school based in-service professional programme. On balance however, it would seem that school based teacher professional
development allows teachers a greater stake in their personal development and ultimately the quality of their professionalism.

5  PUBLIC SERVICE EMPLOYMENT AND CONDITIONS OF EMPLOYMENT

The issues of teacher recruitment, selection and retention are intimately linked to employment law and government policies relating to the role and status of teachers. These factors determine the conditions of service set out for all teachers employed in the government sector, which invariably influence employment conditions for teachers in the private sphere as well. Before reviewing the literature on recruitment, selection and retention it necessary to examine two areas that provide an important backdrop to teacher recruitment and retention: (1) Public Service Employment and (2) Conditions of Employment.

5.1  PUBLIC SERVICE EMPLOYMENT

Teacher policy needs to focus and ensure that the teaching profession select the best possible recruits from the labour force. Most teachers are employed by government in the majority of countries, although the private sector is also growing in its demand for the most highly qualified recruits. Nevertheless, government policies shape teacher employment in most countries. In OECD countries over 90% of all expenditure is spent on primary and secondary schools. The majority of teachers are civil servants and mirror the conditions of the civil service. Furthermore, teachers constitute a large proportion of the public sector. In the APR countries, the status and employment of teachers as civil servants is broadly similar but there are also intra-regional differences.

There are two models of public service employment which transcend most regional and national boundaries. Service employment that is “career based” is a model that expects public servants to sign up to a life long period of service and to accept conditions that are prescribed by government policies. A “career based” model is the pre-dominant model in most APR countries as well as in
France, Spain and Japan. The second model is known as “position based” and mainly focuses on selecting the best candidates for the job. The model allows more open access to jobs, and the opportunities to earn more salary is often greater but appointment to jobs in the first place is more competitive. The motive to improve a teacher’s professional status and development which uses this model, rests with the individual and to a lesser extent with a central ministry. The UK, Sweden, Canada and Switzerland have variations of the “position based model”. Both models provide policy makers with a useful guide and the possibility of a workable hybridisation model for teacher employment.

The employment and status of teachers varies whether they are classed as civil servants or not. Seventy five % of teachers in OECD countries are classed as civil servants and almost all APR nations have similar status. In some OECD countries, UK, Canada, the status is contractual. However, many OECD countries can also employ teachers on a contractual basis by law, and indicates a move away from a single, lifetime model of public sector service.

5.2 CONDITIONS OF EMPLOYMENT

Conditions of employment in most OECD countries are defined by government and teacher unions but there are different processes in individual countries of how decisions are ultimately made. Collective agreements in different OECD member states between central government and teacher unions are the most common. But in Korea and Japan and most APR countries the collective model is not used. Collective bargaining between teacher employers and the unions has been shown by various research studies to lead to different outcomes (Santiago 2004, Hoxby 1996, Steelman et al 2000 ). A case study from Sweden shows how an “individual teacher pay system” operates in a country which has a strong tradition of trade unionism. The system attempts to combine consultative processes with flexible responses in the context of non-standardised working conditions. It appears that this has overcome teacher shortages and improved the match between teachers and school needs. But in the last analysis, such collective arrangements are dependent on the existing financial situation of the country, (Bjorklund et al 2004, OECD 2005).

When it comes to issues such as “on the job” teacher competency, disciplinary matters and redundancy issues, mechanisms exist for dismissal but there
appears to be an over-cautious approach to the use of official machinery in the majority of OECD and APR countries, especially relating to teacher incompetency (OECD 2005). In many APR countries such as Korea and other countries in the region, the case for ousting teachers remains weak due to the “career based” model that is used. It seems that existing mechanisms for dealing with ineffective teachers in the OECD, APR and Latin American countries lack “bite”, because these systems do not have in place appropriate transparent measures to challenge and solve the problems. This unfortunately does not in the long run, provide a sound basis for the reputation and standing of the teaching profession.

6 TEACHER RECRUITMENT, ATTRACTION AND RETENTION

The most important school related factor in pupil learning is the effectiveness of the teacher, but teacher effectiveness varies widely in both its meaning and more crucially how it can be measured? To ensure that an education system delivers what is expected of it, the critical issue is to recognise that teacher effectiveness depends upon a continuum of key stages namely; (a) Attracting suitably qualified recruits , (b) Provision of effective training, (c) Operating mechanisms to retain teachers in the profession and (d) Ensuring that teacher development is part of a policy for lifelong teacher education. In this section of the review, the issues of recruitment, attraction and retention stages of the continuum will be discussed. The seminal OECD publication; Teachers matter: Attracting, Developing and Retaining Effective teachers released in 2005 set the scene for many of the OECD countries to examine existing policies for the supply and demand for teachers. The 2007 Bellagio Seminar was set up to examine in more detail the implications of the 2005 OECD publication. The Bellagio Seminar was attended by education policymakers and researchers from eight countries; Australia, Canada, England, Japan, Singapore, Sweden, Switzerland and the USA (Aspen - OECD seminar 2007).

The aim of the seminar was to explore ways to strengthen teacher policies and provide ideas about culture, tradition and circumstances from each of the countries’ perspectives. This was accomplished by aiming to strengthen and restructure the teaching profession. In the course of the seminar, time was
allocated to looking at policies for recruitment, selection and retention. In the
discussion that follows some of their findings will be included and the
implications they may have for teacher policies in the APR. In this part of the
review there will be two subsections (1) *Teacher recruitment and attraction*
and (2) *Teacher retention*.

6.1  

**TEACHER RECRUITMENT AND ATTRACTION**

*Recruiting* future teachers from the labour market provides policy makers with
the knowledge that an incoming generation of teachers have many other job
options to choose from. In most cases these job opportunities are likely to pay
higher salaries, have higher status and better working conditions. Furthermore,
stable and secure lifelong career pathways and prospects are also factors that
potential recruits to teaching consider. Teaching for the better qualified is no
longer considered to be a lifelong career as shown in the numbers of how
newly qualified teachers consider their future prospects. In the USA, 30% of
teachers leave within 3 years and after 5 years the movement out of teaching
reaches 50% (Schwartz, Wurzel & Olson 2007). In neighbouring Canada, it is
reported that the effects of immigration and economic disparities are making
the life for many newly qualified teachers more difficult with teachers leaving
within 3 years after their training, (Clandinin et.al 2009).

While the rate of teacher “drop out” is not as marked as in other OECD
countries, and to a lesser degree in APR countries, the trend could be emulated
in future years, as the APR economies become more successful e.g India,
China. Even in these countries, the non – teaching areas of the professional
labour force will have greater opportunities of jobs, with better salaries and
improved working conditions. In other words, the nature of the competitive
labour market in most OECD countries, and increasingly in the APR will provide
policy makers with serious challenges about recruiting the best staff and also
retaining their expertise in the profession.

Teacher recruitment is affected by certain features of the teacher labour
market which determines the making of effective and relevant teacher policy
decisions. There are four key features that policy makers need to bear in mind
(a) **Government Control** in most countries determines expenditure on teacher supply, teacher training and certification. Governments also regulate the profession by establishing laws and mechanisms for salary awards, (b) **Entry to teaching** is pre-determined by qualifications, and often teachers need to be qualified in a specialist subject, therefore requiring specialist qualifications. This means in general, potential mobility within the profession is limited. (c) **Partnership** between government and teacher unions in agreeing to salary structure and other conditions of service e.g. working environment, worker rights is common for most OECD countries.

While there is a growing awareness of this area in many APR countries, by and large most APR governments make the final decisions. Collective bargaining tends to ignore the stratified nature of the labour markets, and therefore hinders appointments from outside the profession, when the need arises e.g. teacher shortage in science, maths. Finally, (d) **Organisation and recruitment** of teachers is complex and expensive and mostly relies on the acceptance of paper qualifications without face to face interviews, so providing weak evidence of teaching potential. In most APR countries, schools have a limited or even no say in teacher appointments, as this is left to local authorities and/or a central Ministry of Education recruitment department.

**Attracting** recruits to teaching create quantitative and qualitative concerns which are both interrelated. Where there is a shortage of teachers, the typical response is *either* to lower qualification requirements or raise the “workloads” of teachers by increasing the number of classes assigned to each teacher, or simply by increasing class sizes. However, where no teacher shortfall exists as is in the case of Korea and Malaysia, the oversupply of high calibre school leavers means that there is an avoidance to apply for places at ITE institutions. So it is important to note that teacher supply and demand is variable across regions and countries.

In many countries of the APR, teaching is still viewed with high regard and in the richer developed APR countries e.g. Malaysia, Singapore, Korea, Japan, recruitment of well qualified potential teachers remains promising. It is among the least developed APR countries such as Lao, Indonesia and Cambodia that supply conditions exist coupled with issues about the quality of recruits. It
should be noted that when economic conditions enter a “slump” during periods of recession, the countries that have a well qualified workforce e.g. Singapore, Japan, teacher recruitment increases, which has happened recently as a result of the “banking crisis” triggered in 2008. However, increases in recruitment can be misleading in the richer APR countries, as many newly recruited teachers leave for better jobs in other sectors when the economic climate improves.

The evidence from research about the role played by “relative” salary provides a somewhat conflicting scenario. According to an OCED report, research on the effect of “relative” salaries can influence the decision to become a teacher; for teachers to remain in teaching; and the return to teaching after a career interruption, (OECD 2004a). Nevertheless, it seems that other key aspects such as working conditions, professionalism, job flexibility and job satisfaction are as important as “relative” salary. The implications for policy making seem clear from these findings so that a more productive policy line would be to target and attract particular types of people into teaching, and teachers to particular schools. Such findings favour the notion of “targeted policies”, but for many governments the main appeal is for a “one size fits all”, which would be an easier and less troublesome response. However, it appears that research by Gannicot has shown that good starting salaries for teachers in the top performing Asian economies e.g. Singapore, Taiwan and Hong Kong attract good teachers. However, high starting salaries come at a price in these countries as class numbers are high and other conditions of service may not be as favourable (Gannicot 2009).

What constitutes teacher shortage is still a debatable area from an international perspective and furthermore, it is related to how a “qualified” teacher is defined. Countries differ widely by what is meant by the term “qualified” which makes arriving at cross national comparisons problematical. However, there are two widely used indicators to measure teacher shortage namely vacancy rates and hidden shortages, both of which incidentally have their limitations. Nevertheless, high levels of vacancies do provide strong evidence especially in “hard to fill” vacancies, e.g. Science posts in UK. In hidden shortages, teaching is carried out by someone not qualified to teach a certain subject (called “out of field” teaching). Hidden shortages however, are not only
about teacher supply but are often due to poor staff management and the priorities of school principals.

In OECD countries, teacher shortages are especially evident in computer sciences, information technology and mathematics. Also foreign languages and sciences are shortage areas in some countries more than others. This provides a patchy picture of teacher shortage which is also experienced by APR countries. In several APR countries, depending on the economic cycle, the problem for recruiting teachers in areas such as computer science, information technology, business studies and economics are easier to recruit when there is an economic downturn. Foreign languages, especially for competent teachers of English in most APR countries, appears to be a perennial problem contributing to shortfalls that prompt concern in many schools e.g. Malaysia, Thailand, Vietnam. In the UK, USA, Australia and the Netherlands it is in the fields of science and mathematics that shortages continue to be felt (OECD 2001, 2003, 2003a). The school level also is a factor when it comes to recruitment in specific subject disciplines, the secondary level being the most problematic. This trend appears to be evident across APR and other regions.

Another key factor is the distribution of qualified teachers nationwide. In the OECD countries recruitment problems for schools which are located in poorer city areas, find it hard to attract the best teachers. Surveys from the USA show that so called “educational equity” is due to considerable differences in the qualifications of teachers across school districts (Lankford et al 2002). This is also the case in other OECD countries and in larger APR urban conurbations e.g. Bangkok, Manila. Also in many APR countries where the urban-rural divide is more marked, the issue of attracting well qualified teachers in almost all subjects is of constant concern.

Even in a wealthy country like Australia, the problem of attracting the best qualified staff for secondary schools to remote rural communities has been an issue for the State of Queensland, where *The Queensland Remote Area Incentive Scheme* has been introduced to address the “educational equity” problem, OECD(2005). The State of New South Wales has had to tackle the same problem in its remoter communities. In the case of the less developed APR countries, Cambodia, Myanmar and Laos the urban- rural divide is
significantly greater, reflecting both quantitative and qualitative concerns for policy makers.

In the 1990s various schemes to address these imbalances were proposed for Myanmar, Cambodia and Vietnam such as introducing satellite and cluster teacher training centres located in rural areas (Thomas 1993a, 1996a). It may be valuable once more to re-examine these proposals and adapt them to meet the changing circumstances facing teacher recruitment and training for the next decade. The issue of teacher distribution in rural and the poorer urban areas, raises the question of equity and equable access to sound universal standards of education as envisaged in the original EFA declaration of the early 1990s.

Unfortunately, the recent global financial crisis will have serious effects on UPE slowing down the progress made so far. The impact of the crisis may mean that higher salaries cannot be paid as incentives for attracting better teachers to the poorer rural and urban areas (Bourdon & Michealowa 2009). Even in a relatively well developed APR country like Malaysia, it is reported that the distribution of qualified teachers in rural and remote areas is a serious issue. The Malaysian government has pledged to address this problem by attracting well qualified teachers who are willing to teach in such regions for extended periods,( Moksein, et al 2009). Information about the use of monetary incentives was not available in the report by Moksein et al, but Gannicot working in Laos found that such incentives did not always attract teachers for long ( Gannicot 2009). Unless teacher policies prioritise plans for attracting well qualified teachers in areas where there are serious imbalances in the teacher stock, the prospects for realising EFA remain grim.

6.2 TEACHER RETENTION

Teacher policy needs to ensure that effective teachers work in an environment that ensures their wish to remain in the profession. The word environment covers a spectrum of factors ranging from the provision of adequate salaries to daily working conditions. The retention of effective teachers is a key policy concern even in countries where teacher attrition rates are low e.g Korea,
Japan, Malaysia. There is a constant need to monitor and survey teacher job satisfaction and conditions of service, to avoid the danger of complacency setting into the system, the consequences of which would result in the loss of quality teachers. The issue of teacher retention is closely related to the issues of attraction and recruitment already discussed above.

Retaining existing teachers is particularly important when attracting new teachers, for if the new recruits perceive that they are entering a profession that is seen to have high levels of job satisfaction, and is valued by those who employ them, then the prospects for an effective and stable teaching profession will be perceived as more favourable. It has been shown that most teachers choose to enter teaching because they believe that teaching is important work and beneficial to society. However, even amongst those countries where attrition rates are relatively low, there are areas where turnover is high such as in “hard to staff schools” (Cooper & Alvarado 2006).

It is important to distinguish between turnover rates and attrition when discussing teacher retention. OECD views turnover when teachers leave their current teaching position and seek out teaching jobs in other schools, or other parts of the education system e.g. administration, promotion to further education colleges and teacher training institutions. This means that teachers are not lost to the system per se, but turnover changes can be disruptive if it is not managed properly. Attrition refers to those teachers that leave the profession altogether, and therefore produce more serious concerns for policy makers. Clearly, attrition is the more serious as it results in not only a loss of trained and experience personnel but registers high expense as well. For instance, there are hidden costs of public investment that goes into tuition and tax support for preparing new teachers, many of whom leave within a few years.

In addition, decentralised regions may have to bear the costs of recruitment, induction and mentoring, only to lose many new teachers through the “revolving door” syndrome of teaching. Almost as serious as financial loss, are the opportunity costs which are mirrored in the disruption of coherence, continuity and the school community, all of which are critical to effective teaching and learning, as well as to school management. High teacher turnover
in the long term has serious implications for teacher quality which affects ultimately low student achievers. Research has shown that teachers who switch schools either locally or go further afield, tend to move to schools where the catchment area has a larger proportion of students whose achievement is higher, (Cooper & Alvarado 2006).

Policy efforts have tended to be directed towards the supply side of addressing the issue of retention, but school staffing problems are usually the result of teachers leaving for reasons other than retirement. Ingersoll commenting on retention issues in the USA, describes how visible cultural changes in the school can contribute to lower rates of turnover, reducing significantly staffing shortfalls with the consequent result of sustaining school effectiveness. Changing the school culture means improving teachers’ professional conditions, coupled with an enlightened system of monetary incentives. It is also about improving professionalism and the creation of new learning communities. Creating conditions in schools that are assessment-centred, knowledge and community centred, helps to address issues relating to changing patterns of school cultures. Schools that support creative opportunities for supporting teacher development could also improve the life long career aspirations and prospects for teachers (Ingersoll 2001).

Sound teacher policy needs to be developed with the awareness of the close relationship that exists between attraction, recruitment and retention so that the ultimate goal of producing and sustaining a high quality teacher profession is achieved. Santiago has emphasised the link between teacher supply and demand, and the issue of teacher shortages with the risk of not fulfilling policies to improve teacher quality (Santiago 2002).

In the course of arriving at the goal of achieving a quality teaching profession, there are serious challenges that need to be met. Some of the more important challenges include (a) Making teacher preparation match the needs of diverse learners, developing high standards of content and process, and an awareness of changes in contemporary classrooms, (b) Ensuring that new teachers participate in high quality induction and mentoring programmes, (c) Developing the idea of schools as learning communities for students and teachers, (d) Putting a high priority on imaginative professional development, (e) Providing
a salary system that encourages teachers to aim at quality performance in all aspects of their job, and which contributes to improved student achievement, (f) Providing special systems of incentives that will encourage teachers to work in areas of critical shortages e.g. rural schools, schools in poor urban locations, and finally (g) Focusing on day to day improvements to working conditions e.g. acceptable workloads, access to further training, improved physical amenities like staffrooms that are conducive to a teacher’s non-teaching time.

The IRA report also concerns itself with retention of qualified teachers and makes the point that while there is an overwhelming trend to recruit new teachers, the deployment of veteran and former teachers who wish to re-enter the teaching stock, are mostly overlooked adding to both teacher shortage and a loss of competent experienced workforce. It appears from the IRA report that more imaginative policies need to be developed to tap this valuable source of expertise (UNESCO 2008).

7 POLICY RESEARCH AND DEVELOPMENT

Teacher policy needs to be underpinned by an extensive and informed research base that can be used in substantive and well planned decisions that will render policy making and its implementation effective. The recognition of the key role of research, development and knowledge management in educational practice and policy making is recent. The link between developing the knowledge base from which improved teaching can be improved upon is however, still relatively weak. It remains the case that much of educational reform is limited due to short-term planning and badly timed implementation.

In the last decade there has been a growing focus on educational outcomes rather than on inputs, which is due in part to a pre-occupation of linking economic and educational investment, with measurable outcomes e.g. course completion, development of skill and competencies including the Programme for International Assessment (PISA). Nevertheless there is a growing interest in how far research based evidence can fathom what education actually delivers (OECD 2009b). In this section of the review two areas will be discussed namely (1) Linking Policy Research, with Evidence In Education (EIE) and (2) Teacher Engagement in Policy Research and Development.
7.1 LINKING POLICY RESEARCH WITH EVIDENCE IN EDUCATION (EIE)

Exploring the use of Evidence In Education (EIE) when teacher policies are being formulated, raises the need to examine what constitutes evidence for educational research, and how that evidence can best be applied to problems that are common across a nation or region (and internationally). The re-emergence of what constitutes evidence is due to a number of factors such as:

(a) increased concerns about student achievement and the over emphasis on its measurement, (b) dissatisfaction worldwide about what education systems are delivering, (c) the overt (and covert) role of the internet and (d) the resulting changes in policy making. In the first decade of the 21st century, we already have vast amounts of information, a highly informed public in many countries, generally less quality control and a generation of policy makers who have diverse job experiences and expectations. This is therefore the backdrop to the role of research for evidence-informed policy.

The nature of research methodology that is employed in solving educational problems is a key factor when probing the potential impact about the evidence which emerges from a particular study. It is argued by researchers from several OECD countries that the place of experimental designs and randomised control trials need to be given a stronger role, although there may be disagreements by different researchers about the exact place where they are best employed, (Cook & Gorard 2007). For policy making, it is a question of whether to use the best available evidence or only the best evidence? Surely for making sound and relevant teacher policy it would have to be the latter, if high standards of a particular policy and its outcomes are to be achieved?

When policy makers are faced with emergencies, the outcomes can result in decisions that are both ineffective and inefficient. In education, poor policy decisions maybe due to outdated research, a disjunction between policy and research or that the research is contradictory. There is a difference between research that is Evidence base Policy Research (EbPR) and Evidence Informed Policy Research (EIPR). The former is based on a tidy rational and theoretical approach, while the latter is situational using the best research available at the time, especially during an emergency.
Recently, there has been a swing back towards EIPR as it is less ambiguous than EbPR. By using EIPR it is claimed that evidence can be used more openly to improve both policy formulation and implementation stages. The renewed interest in EIPR is coupled with the greater concern about improved student achievement, better teacher quality, increasing vocal dissatisfaction with education systems in general plus the impact on costs. This means we have an accentuated concern about the legitimacy of policy making in general. It appears from work carried out by organisations such as the OECD and the World Bank, that the key players which not only include policy makers but practitioners and researchers, need to act more effectively within a framework. This framework should enable a “joined up” approach to the part played by meaningful research, that informs those who make the decisions for teacher policy. It is clear that more participation by all concerned is required (Burns & Schuller 2007). However, there are examples where improved participation is already taking place through the use of Brokerage Agencies in a number of countries.

The increasing use of “think tanks” which embrace researchers, policy makers and significant others are used by governments and other organisations for the value they have in facilitating the bridging process between policy making and its implementation. The so called Brokerage Agencies which can be perceived as an outcome of the “think tank” concept, have a key role in the bridging process between the researchers and policy makers. A key role for a Brokerage Agency is to provide transparency between the various research findings about educational quality, and to resolve issues such as; addressing tensions between the time required and the need for quick results, disseminate findings to all stakeholders, ensure sustainability, funding stability and to tackle the task of incorporating all stakeholders.

Brokerage agencies have a key role to play in linking research and policy, and are characterised by the goals that are set and the means by which those goals are reached. The agencies assist policy making by collaborating with subcontractors, conduct surveys and develop questionnaires so that the service they provide meets the demands of the user e.g researchers, policy makers and practitioners. When the need arises to draw parallels between education and other sectors, brokerage agencies are valuable in enabling
comparisons to be made which would benefit teacher policy in the mid to long term. Some of examples of brokerage agencies are the UK based Evidence for Policy and Practice Information and Coordinating centre (EPPI Gough 2007). In Canada, The Canadian Council on Learning(CCL) (Ungergleider 2007) and in New Zealand, The Best Evidence Synthesis Programme (BES), (Alton Lee 2007) are well established agencies which play a key role in helping to make more enlightened policies.

The use of EIPR in tandem with Brokerage Agencies has been an encouraging development in many countries around the world since 2000. Such developments enable policy makers to look more closely at the quality of the relationships between primary stakeholders, as well as how a particular project bridges the gap between the evidence they provide and the needs of the policy maker. An example of research in practice which may influence teacher policy decisions comes from Singapore, which has a forward looking and unique situation where funding and research opportunities are supported by a strong data base with information on the entire student and teacher population (Hogan 2007). In Canada, the role of evidence-informed research for policy making takes the form of the launch of the National Children’s Agenda which aims at “Fostering Good Canadians” by aiming at lifelong learners, workers and parents (Brink 2007).

In Finland, “Life as Learning” 2002-2006 aims to develop a research culture to support interdisciplinary and international research projects. But the time mapped out for the project and funding problems were a challenge to many research communities (Nieme 2007). In the United Kingdom (Pollard 2007), the Teaching and Learning Research Programme (TLRP) with 500 researchers and 60 teams spanning the period 2000-2011 aimed not only to improve the quality of educational research, but contribute to new knowledge for policy makers, practitioners, community and media. The above examples show the relationships between the various stakeholders in terms of information flows, and what can be done to improve participation of all concerned.

In the APR there have been many educational reforms and initiatives which have been generously supported financially, however some of the many reforms have been found to be ineffective and unsustainable. One of the main
reasons for this, is the lack of a *comprehensive knowledge data base* for policy development supported by relevant and sophisticated research (Cheng 2005a, 2006, 2007). According to Cheng there is a need for future developments in educational research to support paradigm shifts, policy formulation and practice of educational reforms around the APR, in the context of globalisation and the changes globalisation brings.

The cry made by Cheng for a more *comprehensive knowledge data base* for policy development has been echoed more recently by Anne McMaugh in Australia, for a National Data Repository for Teacher Education which will serve the need to centralise and systematically collect teacher education data for shaping future teacher education policy making (McMaugh 2008). In other publications, McMaugh et al, Cochran-Smith and Zeichner have also pointed out that the teaching profession is facing a changing future as we still have to learn more about preparing teachers for the future. These authors describe an increasing trend about the disjunction between the teaching workforce and the students they teach (McMaugh et al 2007, Cochran-Smith & Ziechner 2005). This reflects differing cultural and language backgrounds and generational differences in the proficient use of technologies. It is precisely these issues that EIE needs to address. However, Cogan and Kennedy reporting on the OECD /CERI Schooling for Tomorrow (SFT) project provide an example of EIE in practice. A series of scenarios which were the outcome of the research used in six Asian Pacific Societies. (Cogan & Kennedy 2004). Studies such as these produce valuable research data providing evidence for formulating teacher policies aiming to improve school effectiveness for the future.

**7:2 TEACHER ENGAGEMENT IN POLICY DEVELOPMENT AND RESEARCH**

It is crucial to recognise that stakeholders, concerned with a particular teacher policy eg introduction of multi-grade schools, need to agree with the policy that is proposed, and the ways it will be implemented. Over the years, it has been shown that where teachers are not involved in teacher policy, it is unlikely that much of the policy will be successfully implemented. However, stakeholders including teachers should not hold up reform by using the powers of veto, but recognise in the end that all policies and their implementation has
been mandated through the ballot box by mostly democratic electorates. The art of successful policy making is achieving a consultative balance between all the interested parties, (OECD 2005). Consultative balance is best achieved by institutional arrangements that promote dialogue which engage teachers and the professional associations to which they belong, giving them full participation in policy formulation.

In the UK, The General Teaching Council provides a forum for teachers and other stakeholders to develop, critique and assist where possible, in making policies work, as well as being a locus for profession-led standard setting. Similar bodies exist in Ireland, Sweden, Chile and in the other regions of the world including the APR. It is clear from the international literature discussed above, there are many research gaps concerning the teaching profession. It is paramount that these gaps be filled wherever and whenever possible, as it provides an essential knowledge base with the potential for improving teacher policy, and consequently better quality teaching and learning. The injection of relevant new information and ideas into schools and colleges is likely to engage teachers more actively in their day to day teaching. So the guiding principle of “ownership” should underline the process of reform and particularly at the formulation and implementation policy stages.

The notion of “ownership” should also extend where possible into the ways in which teachers and teacher educators can be actively involved in researching new information and developing it for improving pedagogy. In most teacher policy research projects teachers and school principals are the main respondents providing the essential data for whatever the research enquiry is planned. Nevertheless, there is a paucity of information in many countries of the extent to which teachers are actually engaged in the research process. A greater involvement of teachers in the actual process of planning and engaging in the research would be a valuable input. There would of course be implications if teachers were to be more closely involved in the research process, such as selection of appropriately qualified teachers, issues of “time off” from other duties, costs and equally important the need for basic research training. Nevertheless, the benefits are likely to outweigh these considerations and improve the overall quality of policy research for all concerned.
There is an increasing concern that schools are poor at using so called “motors” of innovation such as research knowledge, networking, modular restructuring and recent advances in technology (OECD 2009b). Innovations in science as portrayed by one of the four key OECD “pumps” seem not have been used sufficiently by the education sector. The ”innovation pump which envisages teachers pooling their scientific knowledge and “horizontally-organised expertise via networks, provides an excellent opportunity for teachers to exchange ideas about practical as well as theoretical fields of knowledge. The main barrier for teacher interaction is the rigidity of individual teacher classrooms and individual schools which typify most school systems. In the case of ICT the “information and communication technologies” pump sees its potential to transform education and the ways in which it is delivered. Resistance to change on the part of school administrators and teachers means that it remains underdeveloped and under used.

The case for teacher engagement in policy development and implementation has been recognised by the ILO/UNESCO committee of experts since 2003 as a key issue in successful teacher policy making (CEART 2003). This was later backed in 2004 by Dempsey (Chair) of the OECD Ministers of Education Meeting in Dublin (Dempsey 2004). The importance of “social dialogue” between teachers and policy makers provides an essential means for implementing change and reform in areas such setting educational policy objectives. However, it has been observed that “social dialogue” is still a fragile area in many countries when decisions have to be taken about major issues affecting schools.

In Chile, Italy and Sweden wide consultations between the main players in education reform has proved to be successful as a source of drive and facilitation. In Italy, new legislation was introduced to monitor teacher performance and professional training. In order to pass the legislation in 2003, the Italian Commission for Education held many meetings with all stakeholders including Teachers’ Professional bodies to discuss the proposed changes. Changes covered the establishment of a national teacher evaluation system and changes to both initial and in service education. Consultations took place over 18 months and is widely thought to have been a key factor in the success of the policy. In Chile, the government wished to implement a new
system of teacher evaluation which had been the subject of a long drawn out dispute since 1991 with the Teacher Unions. As a result of a move by the Minister of Education to set up a “technical committee” in 2003, teachers’ representatives were fully represented and engaged in policy formulation and implementation, the outcome of which was a progressive and innovative evaluation system (OECD 2005).

Reaching consensus through dialogue and collaboration on matters of professional development with the aim of greater teacher engagement, seems to have been a success story also in Sweden, building on its tradition of collaboration in the workplace with other parts of the work force. Examples of engaging teachers in the process of policy making and implementation can also be found in Ireland, where The Teaching Council of Ireland acts a forum for not only reviewing teacher reform, but also creating new ideas to enrich reform. (OECD 2005).

However a key factor in discussions about teacher policy is about improving the knowledge base from which teacher support is ultimately derived. There are many gaps in the knowledge base, and even when a particular gap is bridged, the issue of how effectively is the new knowledge understood and used by teachers? It is perhaps with these and other issues that strong teacher engagement in searching for EIPR needs to be developed. A key issue in the present debate about teacher engagement, extends to the issue of teachers being trained as researchers so that research capacity can be developed, making teacher engagement at the policy level even more effective.

The idea of training teachers as researchers, and the link with building up research capacity, was suggested by the present author earlier, when the need was being voiced in several countries in South-East Asia (Thomas 1996a). It seems appropriate therefore, that teacher engagement should address their research training as well. As a note of caution however, it might be wise to pay attention to the work of Hargreaves (2003) who warns against an over enthusiastic approach to teacher engagement where so called “contrived collegiality” is imposed from above. This leads to less teacher collaboration and especially when the urgency of a reform has abated.
In addition to the previous sections of the review, three issues emerged in the course of the literature search. While each issue is addressed separately for purposes of convenience, the issues relate to the wider field of teacher policy discussed above and to some extent to each other.

8.1 GENDER AND TEACHER POLICY

In the case of gender issues relating to equality, equity and efficiency in many OECD countries women and girls have moved significantly ahead of boys and men in education. The figures show that expected numbers of females staying on in school is 7 and 6.6 for boys (OECD 2008). These figures are not uniform across all countries, but the trend is in favour of female expectations. The same trend is also seen for entry rates to tertiary education, where again females outnumber their male counterparts. When it comes to teacher recruitment more females are being trained for teaching than males, so that significantly less men teachers end up in the classroom especially in the early years of schooling.

While the above describes trends being shown by most OECD countries, a report by the United Nations Girls Education Initiative (UNGEI) in 2009 shows a rather different picture for the 32 poorer countries in the APR. In a Technical Paper entitled “Towards Gender Equality in Education, presented in Nepal as part of an UNGEI Advisory Meeting in 2008, it was pointed out in Part 2 of the report, that gender indicators help to reveal that there are differences between boys and girls in the teaching-learning process. Pertinent “quality” indicators include curriculum, textbooks, and the number and quality of teachers including female teachers. The ethos of a “girl friendly education” is also listed as an indicator and its importance, so that girls can continue to attend school (UNGEI 2008). In the Report, three questions were posed about the teacher quality indicator; 1) Are there enough teachers? 2) Are teachers professionally equipped and, 3) Are teachers sensitive to the different learning needs of boys and girls?

In response to the first question, the measure of Pupil Teacher Ratio (PTR) shows that for East Asia it fell to 20:1 but in the following examples the values recorded were as follows: Cambodia 53:1, Philippines 37:1 while South and West Asia were 39:1. In some countries a serious problem with teacher supply
provides PTR with national averages worst in the region as a whole. Blanket national averages do not give the full picture as they hide poor and inefficient management of teacher resources. Countries with better teacher supply is seen to have a higher proportion of female teachers (UNESCO,EFA, GMR 2008a).

In addressing the second question about teachers being professionally qualified and equipped, there appear to be wide differences between East Asia with more than 70% qualified, as compared with South Asia showing a range from 31% for Nepal to 67% for the Maldives. In many parts of Asia, the provision of In-service education is growing in the numbers taking the courses and in the quality of the courses. But according to Bista, more female teachers need to be allowed access to In-service education(Bista,2006). India seems to have a serious shortage of teachers in many states, so contract teachers have been appointed to fill the gaps. However, these teachers are less qualified and receive lower compensation than regular teaching staff. The Global Campaign for Education argues that pay, status and support are cardinal in developing a quality teaching force. It also states that there are problems with gender parity in remote and rural areas.

Finally, in tackling the third question, it seems that there are promising developments, as gender concerns are being built into content and pedagogy for in-service education. However, there are worries that more gender sensitive learning experiences need to be created, so that all students whether they be boys or girls, can take full advantage of their learning regimens. In Vietnam, Nethercote et al report from an ADB Gender Equality Project, that teaching methods are being introduced to service a diversified curriculum to address gender issues. Also in-service courses are being developed that include specific programmes that deal with gender issues,(ADB 2010).

There are considerable differences in the numbers of female teachers across the APR. In countries with high gender disparities such as India, there are more male teachers than females. In India, 20% of all schools are single teacher schools and the majority have only a male teacher. On the other hand, in East Asia and the Pacific there are more female teachers,which reflects a highly feminised teaching profession, not unlike the situation in many OECD
countries. Feminisation is particularly evident at the early childhood and primary levels.

However, in Papua New Guinea at all school levels, the teaching staff is mostly male, as is the case in Cambodia, Lao, Marshall Islands and Timor Leste at the primary level. In Indonesia and China, there are also more male teachers in secondary schools. But according to the *EFA Global Monitoring report*, countries in the East Asia region and Pacific show that the 50% mark has been reached for female teachers in Primary schools, (UNESCO 2008a). The picture in South Asia eg India and Pakistan for female participation is less promising being well below the 50% mark in many countries. The reasons given for these statistics seem to lie with the poor participation rates of female students at the secondary and tertiary levels. Finally, when examining the data on Governance the status of women is even more serious. Apart from The Maldives and Sri Lanka, women are seriously under-represented as head teachers, principals, administrators and policy makers. Even in countries where more females go on to higher education as in Mongolia, the number of men in high status positions outnumber their female colleagues by 70%. Similar disparities exist in secondary and tertiary institutions in Vietnam, Cambodia and Thailand (UNGEI 2009).

8.2 **LEADERSHIP**

School leadership is key to the quality of schooling by creating the most appropriate organisational conditions for effectiveness and improvement. The research on school effectiveness points to the pivotal role that leadership plays on the overall success of schools. Cheng has pointed out that in Hong Kong, there have been three waves of education reform. The first wave was concerned with achieving planned goals, the second wave focused on inspection and quality assurance while the third wave is now the pursuit of school effectiveness, in which the role of school leadership is even more crucial. (Cheng, 2003). It has been shown in Australia that good leadership contributes to Organisational Learning (OL) or collective teacher efficiency which in turn affects teaching and learning (Mulford 2003).

However, the role of a leader in school environments is a complex one as he or she is not in the classroom for any length of time. The role of leader is about
shaping quality by ensuring that the conditions within the school are conducive for effective teaching and learning. This is done by providing where possible professional motivation, a capacity to carry out the various teaching tasks and to ensure that the working conditions within the school environment support teaching, learning and the school’s well-being.

In the United Kingdom, research on Teachers’ Work, Lives and Effectiveness showed that 80% of teachers interviewed found; leadership, colleagues, and school culture to be key influences, positive (and/or negative), upon their capacity to be effective. The quality of leadership, both at the school and departmental levels, relationships with colleagues and personal support were also major factors that influenced teachers to give their sustained commitment to remain in their jobs as teachers (Day et al 2006). School leaders are therefore particularly influential when it comes to improving teacher quality, goal setting, assessment and accountability, management of resources, strategic planning and often collaboration with organisations external to the school.

The OECD has set out a number of orientations about the place of school leadership in teacher policy for the future (OECD 2008a). These include a redefinition of school leadership in which leaders need to ensure that they support, evaluate and develop teacher quality, engage in goal setting and enhance financial and human resources. Also a wider role outside the school which would benefit future school prospects eg involvement with community, local industry etc. The sharing of leadership is a strengthening factor within the school involving middle management, school professionals and governing bodies. Shared school leadership where possible should be part of teacher policy that seeks to improve the quality of school staff (OECD 2006).

School leadership extends to many facets of school life such as mentoring, induction, developing school based in-service courses. It is clear that for potential leaders to be ready for the role leadership training is essential. Therefore, teacher policies should reflect this in the formulation stage of the process and to follow this up with well thought out implementation strategies. Policies that achieve this objective means that career pathways are established for school managers and those teachers who aspire to such a role.
In Australia, it has been recognised that there is a growing shortage of schools leaders and a declining trend for suitably qualified candidates. Some of the reasons for this is the perception by potential leaders that the job is too demanding, stressful and lacking in support from the school staff and those who formulate teacher policy (Mulford 2003). Therefore, it is essential that teacher policy will contain measures to attract aspiring school leaders to these roles with salaries that are commensurate with the responsibilities that are associated with the post. As leadership needs to attract the best candidates, the working conditions as well as the salary structure needs to be on a par with similar terms of employment in other sectors (OECD 2008). It therefore, underlines the need that able and well trained school leaders are not only key in attracting good teachers but they can play an important role in retaining good quality teaching staff.

In the Asia Pacific Region there is a need to develop more mid range theories into various aspects of principal-ship (Walker 2003). In doing so, the cross cultural differences which pervade different notions of leadership could be met, providing a much needed cultural balance to the application of leadership models, that have a strong western flavour, and still tend to be the favoured approach to school leadership. Teacher policy research which is mindful of the need that Walker discusses, would provide a valuable contribution to improving teacher effectiveness as well as that of the school as a whole.

8.3 TEACHER DEPLOYMENT

There are countries where school-age populations continue to grow steadily and where UPE or basic education has yet to be achieved. In addition, the existing teacher labour force have low levels of qualification. It is in this respect that shortages reflect the insufficient supply or deployment of teachers to meet the demand. In developing countries the availability of resources is critical, especially in times of emergency, epidemics or recent conflicts as in Pakistan, Sri Lanka and Indonesia. It is often the case that communities have to bear the brunt of these emergencies and where governments have been relying on aid from NGOs, and International assistance from agencies such as UNDP, UNICEF and rich donor countries. This means that changes to teacher education policies have to be made literally “overnight”, such as abolishing
primary school fees with the consequences of an influx on new students, putting greater strain on existing resources especially on teacher supply.

It is recognised that the number of teachers needed in one country does not vary in simple proportion to the number of students. It also depends on the efficiency of the existing system and how teachers in that system can be deployed effectively (UNESCO 2006). It was recognised as far back as 1966 that no state should be satisfied with just tackling quantity issues, but addressing the need to improve teacher quality is equally important (UNESCO/ILO 1966). This position was also echoed in the Education for All Dakar Framework for Action. In other words, capacity alone will not ensure effective teaching and learning so essential for UPE and indeed for secondary schooling.

Teacher deployment provides a set of options which helps the balance between supply and demand even in the most difficult circumstances. The main challenge facing policy makers is adjusting the responsibilities and renumeration of teachers so that policy goals are met. School organisation is a key element for teacher deployment policies. In the case of multiple shift schools it is possible to adjust the number of student instructional hours to educate more children with the same number of teachers in existing school buildings. However, as Amelewonou et al have pointed out, how shift arrangements are designed and implemented determines the quality of instruction that students receive (Amelewonou et al 2005). Bray has shown that students in double shift schools do no worse than those in single shift situations (Bray 2000).

Another element in teacher deployment policies would be to use the PTR as an indicator. The link between the annual increase in the teaching stock needed to meet UPE by 2015 shows how the PTR, which is an aggregated measure, can help to reveal how the capacity of an education system in terms of teacher over/under-utilisation can be assessed. As a result, it may be possible to accommodate more students without hiring additional teachers. In the poorer African countries eg Malawi, Congo, Niger this may not be feasible, while in some Arab states eg Kuwait and the United Arab Emirates this can be an option. Embarking on teacher deployment policies should however, always be accompanied by a certain degree of scepticism as national statistical data does
not always reflect the true reality of conditions on the ground. For instance, a teacher may spend less time in the classroom than proscribed, due to high absenteeism or on the other hand, spend more time in class working in overburdened schools.

The relationship between class size and the hours of instruction provide a set of indicators that are used in determining deployment policies. Many of the OECD countries such Norway, Hungary and Japan have declining primary school populations, where there are low hours and small class sizes, this has meant these countries can increase their investment into their education systems. However, many countries in APR have to make “trade-offs” between the two parameters. In Cambodia there are bigger class sizes(over 60 students per teacher) but fewer teaching hours (less than 700 hours annually). In contrast Bangladesh, and Indonesia have fewer students (23 and 18 pupils) and longer hours of Instruction (1391 and 1260). It is often difficult to get a balance from the statistics, as in countries such as India and the Philippines both parameters are high.

From the above statistics on imbalances, it would seem more sensible to look at the situation and conditions at the school and local district levels, in order to evaluate the prospects for providing data when implementing teacher policy. The work of Gannicot which examined the relationship between class size, teacher quality and salaries found that in the top performing Asian economies eg Singapore, Taiwan, Hong Kong, Korea and Japan “trade-offs” between the parameters have been successful,(Gannicot 2009).

The lesson it seems is that by recruiting the best teachers and paying them good starting salaries, attraction into the teaching profession can be successful. Implementing this type of deployment policy means there is a need for fewer teachers so that the authorities can afford to be more selective about whom they can recruit. It is a “vicious circle” as Ganicott points out which the poorer APR countries are at present are unable to address. Nevertheless, it would seem that those drawing up deployment policies in the less well APR countries need to consider the “trade off” option if and when their economic conditions improve.
REFERENCES


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<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>APR</td>
<td>Asia Pacific Region</td>
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<tr>
<td>BES</td>
<td>Best Evidence Synthesis</td>
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<td>CCL</td>
<td>Canadian Council on Learning</td>
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<tr>
<td>CEART</td>
<td>Committee of Experts on the Application of the Recommendations concerning Teaching Personnel</td>
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<tr>
<td>CERI</td>
<td>Centre for Research and Innovation</td>
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<td>CTD</td>
<td>Continuous Teacher Development</td>
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<tr>
<td>EbPR</td>
<td>Evidence based Policy Research</td>
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<td>EFA</td>
<td>Education For All</td>
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