出國報告(出國類別:其他)

第四屆地中海區比較教育學術年會暨研討會

服務機關:國家教育研究院籌備處

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壹、目的

本次出國目的在於以撰寫之 "Shifting from Equity to Adequacy in Education Policy Making: Taiwan's Experience"論文,至地中海比較教育學會之年會中發表台灣之相關教育政策發展與研究成果。除發表研究所得外,另外亦藉此行瞭解位於南歐之地中海地區國家,包含法國、西班牙、義大利、希臘、土耳其,與北非之埃及、突尼西亞、摩洛哥等國之教育發展與研究情形。此次研討會主辦國摩洛哥,位於地中海與大西洋交界,因地利位置之故,除先後接受西班牙、法國之殖民外,並承襲伊斯蘭文化立國,在多元文化交織下形成今日的風貌。此行亦可藉由參訪若干研究機構,與當地研究人員之交流,瞭解一向爲我國研究所忽略的北非地區教育概況。

貳、過程

一、時程安排

時容間	活動內容	地點
11.05-11.06	啓 程—巴黎轉機—摩洛哥	法國航空
11.07	抵達首府 Rabat	Ibis Hotel
11.08	學術晚宴	Palace Hotel
11.09-11.10	研討會	Rabat University
11.11	文化参訪	Casablanca 古城
11.12-14	回程—巴黎轉機—台灣	法國航空

二、發表內容懷述

長久以來,台灣教育爭議問題之一:國民教育既屬全體國民的基礎教育,爲何居住縣市的不同, 學校教育品質也不同?如果因爲縣市財政狀況使各縣市的教育條件有所差異,中央政府的補助計畫如 何弭平地區之間的落差,使學生的受教權益不受影響?因此,如何落實教育公平(educational equality)的 理想,成爲近來台灣教育界關注的重點。本篇研究論文即是基於此出發點,以台灣近年相關政策發展 爲例,由制度面進行的縱貫分析。 許多政策制訂者或學者,多主張可以用兩個方面來看待公平的意涵:一爲水平公平(horizontal equity),一爲垂直公平(vertical equity)。前者主張相同條件相同對待,所以經費分配時應將差異縮到最小;後者則主張差別條件差別對待,尤其應該有濟弱扶傾的精神,分配較多資源給條件不利者,即是所謂的「積極差別待遇」(positive discrimination)處置方式。但即使強調要有濟弱扶傾精神的垂直公平,實施後仍有其爭議之處,一個是條件不利者之認定可能有其困難;另一個則是投入資源後能否達到預期的成果。隨著教育改革的發展,資源分配政策由垂直公平的精神已更進一步朝向適足性(adequacy)方向修改。

適足性指的是大多數學生都得到足以達到高標準教育成就的基本額度經費,而且只有在每一所學校教育經費都達到充足程度時,教育改革才能完成。因此,適足性關注的是投入與產出之間資源是否充足,一改過去只檢視資源投入數量而忽略產出評量的窠臼。換句話說,適足性即代表所提供的資源足以達成某些教育結果,諸如通過最低標準的成就測驗。換言之,教育適足性所提倡的並不是從最富有的地區(學校)中取走經費,而是想把最低支出地區(學校)提升到對學生有助益的水準。其精神可歸納爲三項意涵:(一)必須賦予學生充分教育資源,(二)資源隨學區、學校、學生不同的特質而有所調整,(三)必須買定個別學生所欲達成的教育成就標準或學習目標。

所以一個教育適足性的理想模式,在教育預算分配上應以實際需求爲考量,確實照顧各個學校與個別學生的需求,充分賦予達成預定目標的資源,確保其足以發展孩童的個別潛能。早期適足性概念所強調的僅是基本技能與最低(minimum)限度資源的供應,後來轉爲對教育品質的重視,投入充分的教育資源,促使各種程度的學生都能達到預訂的學習成果標準,其最終目標則是希望能夠發揮其潛能,以便日後能在就業市場足以與其同儕相匹敵。本研究論文認爲,台灣資源分配政策的適足性考量還是停留在「最低限度資源的供應」,但爲因應強調績效責任的趨勢,將來應該加強後續的調整,不但應將資源分配隨學校本位與學生個別特質相互結合,更要確保資源足以協助學生發揮潛能以達到特定學習成就或標準,因此各種補助計畫應配合成效考核,尤其著重於學生各種或就的進步情形。

三、活動內容概述



摩洛哥人口有99%爲回教徒



首都 Rabat 現代化的城市中,仍保有傳統的古城區



沿海地區有地中海區域一貫的藍、白色建築



身著傳統禁衛軍服飾的國王靈寝首衛士

防件一 5



本次學術晚宴舉辦之飯店 Hotel Palace



與地中海比較教育學會會長 P. Mayo、UNESCO 教育 計畫中心主任 M. Bray 治談訪台事宜



芝加哥大學 J. Lilja, 主辦人 C. Borg, 日本比較教育學會長大塚豐、南非大學校長 A. Melck, 法國學者



Rabat 大學 K. Mitja 與其博士班學生

附件一 6





研討會報至門口

各國學者報到



教育政策與社會正義子題研討會



會議主席 M. Ezroura

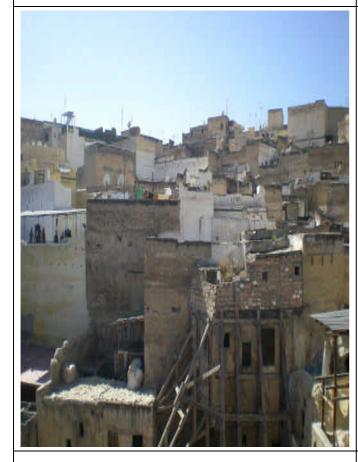
7





摩洛哥傳統街道

巷道为—景



內陸古城 Fes 之建築樣式



沙哈拉沙漠外緣

參、心得

本次參與學術會議之主要心得,即爲瞭解在多元文化交織底下之摩洛哥,在經過法國、西班牙、與回教文化交相統治與影響後,已成爲一融合南歐、穆斯林、與非洲文化的獨特地區,雖然其居民幾乎全爲回教徒,但與傳統之回教信仰仍有其不同之處,處處可見受西方天主教文化的影子,其清真寺建築充滿哥德式建築意涵影響即是一例。在教育方面,教育是次於家庭的判斷摩洛哥人社會階級的另一重要參考指標,住在城市人口的摩洛哥人識字率約55%,但因爲傳統宗教之性別差別學符問題,故女性在識字率遠比男性要低,約僅有40%。但官方現正致力於將義務教育延至14歲,藉此提升女性孩童的識字能力與就學機會。所以就其教育實施而言,現階段主要努力的目標仍在基礎教育階段的奠基部分,雖然其教育品質與狀況比起其他鄰近非洲國家而言已屬領先,但仍爲聯合國UNESCO列爲重點補助的國家。台灣現階段雖無法加入聯合國轄下之組織,但台灣實施義務教育之成果與獨特經驗,對於長期苦於義務教育品質低落的國家,實在可藉由特殊管道或途徑,與其分享我國教育實施的成效,如此次之國際會議即是一例。

經由和與會學者討論台灣情況後認為,台灣的國民教育自1968年實施以來,強迫入學政策學生普遍就學,就學率與升學率均達一定水準,與摩洛哥情況顯然進步許多。但爲維持全台3,300多所國中小學校的運作,教育資源的投入卻成爲重要的議題,因爲國民教育學生人數眾多,加以學校普遍分佈於全國各地區,學生享受的教育資源因而有地區、縣市、學校規模、與家庭背景等差異。國民教育學生成本依其居住縣市、學校規模、城鄉狀況而有差異,城市地區的大型學校學生公成本因爲班級規模大而降低,但是家庭支出的補習費等私成本項目卻很高,鄉區小型學校學生公成本因爲班級規模小而居高不下,家庭支出的私成本卻很有限,城鄉差距非常明顯。這是我政府應該集思廣益,努力於問題解決之處,以明平可能產生之社會不公現象。

肆、建議

隨著社會變遷與經濟情勢的發展,教育的差距已經在所難免,政府勢必以各方式的教育政策介入 ,以避免社會不公引起的教育不公。因此,其中最重要的解决途徑之一,就是建立一套公平化的教育 財政制度。整體檢討近年來我國相關法令對於國民教育資源分配的規範,首先本著「水平公平」的理 念,依照一定標準平均分配支用,對於具有特殊需求的學生、學校與地區,則本著教育財政公平的「 垂直公平」理念,給予條件不利者較多資源,這也就是「積極差別待遇」。至於各級學校教育經費基 本需求與各地方政府應分攤數額的計算,保證其經費達到一定水準,則是教育資源分配「適足性」第一階段理念的展現。然而,教育實施的品質,仍然受到居住地區家庭背景、學校與社區條件等因素之影響,而存有相當的差異,展望未來,我國教育資源分配可由下列方式思考其公平面向:

1、在水平公平方面

目前實施中央對地方政府一般教育補助款的分配方式,雖然是以基本需求爲計算基準,但是各縣市之間的條件畢竟過於懸殊,加上財政能力的差異,使得各縣市、地區、學校學生享有的教育資源還是有顯著的差異。其中教師人事費與班級規模之間的關係,直接影響到每生平均教育經費。偏遠或鄉村地區、財政能力較弱縣市、以及工商業較不發達地區的學校與班級規模,一定比都會地區、財政能力佳、工商發達地區學校爲小,前者的每生平均教育經費當然比後者高,然而這不能視爲偏遠地區教育品質比都會地區爲佳的佐證,更不宜因此認爲偏遠地區資源浪費必須裁併小校。將來還是有待藉著修正補助公式,加強不利地區權重等技術調整以提升水平公平。

2、在垂直公平方面

目前實施的特定教育補助,乃是以配合行政機關施政重點來進行。以近年來對弱勢族群的教育補助來說,固然可以視爲是政府對弱勢照顧的重視,其實也反映出教育現場弱勢學生急遽增加,資源困窘的問題,究竟補助計畫能夠解決多少弱勢學生背後的家庭與社會問題,並不是僅以補助資源就能解決。此外,這些特定補助計畫都是以逐年頒佈,逐年審查的方式實施,計畫的不確定性很高,致使許多經費就是在年度更迭中浪費了。加上社會型態多元化之後,各種利益團體應運而生,對於資源的競爭愈形激烈。未來垂直公平的課題,應該多方討論弱勢團體的界定與優先順序,並且加強補助計畫之間,以及各行政機關之間資源的統整,避免重複補助或是分配不均的情況發生,才能真正照顧最需要幫助的學生。

3、在適足性方面

我國資源分配政策的適足性考量還是停留在「最低限度資源供應」的思維,但爲因應在全球化經濟競爭時代對績效責任的強調,將來應該加強資源補助後的稽核措施,不但將資源分配隨學校本位與學生個別特質而調整,更要確保資源足以協助學生發揮潛能以達到特定學習成就或標準,因此各種補助計畫應配合成效考核,尤其著重於學生各種成就的進步情形。

Shifting from Equity to Adequacy in Education Policy Making: Taiwan's Experience

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Abstract

This paper aims to exam the concept of social justice, equity and fairness in educational arena and its

change toward adequacy. In Taiwan, a shift is occurring in education policy making from equity to adequacy,

and from emphasis on inputs to emphasis on high minimum outcomes as the goal of educational policy. By

examining an equity oriented, longitudinal policy--- Educational Priority Area, this paper will argue that a true

adequacy mechanism is emerging. Taiwan is experiencing a systematical change of policy making that links

resources to outcomes to ensure all students receive an adequate level of education.

In Taiwan, the initiative of Education Priority Area started from 1995, based on the idea of "positive

discrimination" developed in UK during 1960s. Contrary to the decline in UK, Education Priority Area in

Taiwan is getting its focus and extends its influence in delivering diverse education services. This paper has

traced this policy back from 1995 to 2009 and analyzes its change in contents.

The documental analysis has been taken as the main research method in this paper to explore the deep and

wide context of this meaningful policy in terms of social justice, equity and fairness. The findings of this paper

will indicate the concept of adequacy will be raised and enhanced in planning the related policies and

第10頁

delicatelize the practice of social justice, equity and fairness in education policy making.

Key Words: equity, adequacy, Education Priority Area

I. Preface

Since time past, one of the issues of contention surrounding Taiwan has been: compulsory education is the basic need of all citizens; hence why is it that as the living prefectures vary, so do the quality of schooling? If the disparity between the schooling conditions was caused by the financial status of each prefecture, how can the central government's aid programmes balance the differences among the regions, so as not to affect the educational rights of students? Therefore, finding ways to achieve the goal of educational quality has become a

recent focus of the Taiwanese education community. Many government policy makers or scholars (Clune, 1994; Conley & Picus, 2003) mostly advocate two aspects in looking at the meaning of equity: one being horizontal equity, the other being vertical equity. The former stresses on equal conditions and equal treatment, hence the differences in fund provision will be kept to a minimum; the latter stresses on different treatments based on different conditions, and it especially condones the spirit of supporting weaker entities, providing more resources for the disadvantaged – in other words, taking the method of positive discrimination.

The controversial aspects of vertical equity are as such: one lies in determining the disadvantaged, and another lies in the level of differences in resources to be allocated. After 1990, along with the development of the education reform, resource allocation policies have advanced from vertical equity to that of adequacy. Education financial adequacy refers that most students are able to obtain the basic amount of funds to sufficiently achieve high standards of academic results; and only when the educational funds of every school have reached a sufficient level, can the education reform be completed (Odden & Busch, 1998). Therefore, adequacy focuses on whether the inputted and generated resources are sufficient, moving away from the set pattern of mere monitoring of the amount resource allocation, which neglected the evaluation of generated resources (Clune, 1994; Goertz, 1994; Odden & Piccus, 2000). In other words, adequacy represents the provision of sufficient resources to achieve certain educational results, such as the passing of the minimum standard achievement test." (Berne & Stiefel, 1999) Therefore, what the education adequacy promotes is not the withdrawal of funds from the most affluent area (schools), but rather improving the areas (schools) with the lowest expenses to a level that is beneficial for students. This ideology can be categorised into three sections of meanings: (1) Must fully provide students with educational resources, (2) Resources are to be adjusted according to different characteristics of regions, schools, students, (3) Must set academic result standards or learning goals specific to individual students.

Therefore, an ideal mode of educational adequacy, is in using actual requirements as a measure for forecasting education allocation, taking into account the needs of each school and individual students, fully providing the

resources needed to achieve preset goals, ensuring that they are enough in developing children's individual potential. Early adequacy concepts emphasised only on basic functions and the provision of minimum resource levels; subsequently it turned its attention to educational quality, investing adequate educational resources, spurring various levels of students to achieve preset study results levels, with its final aim being to hopefully express the students' potential, so that they can compete ably with their peers in the professional field. The latter part of this paper zooms in on the analysis of such practices within the Education Priority Area as a reference. The investigation into educational equity, be it from a philosophical, sociological or financial perspective, all stress social justice as its ultimate ideal. Seen from the educational investment or resource administration angle, whether educational resources are fairly and reasonably distributed among different schools or students, is an important element in affecting the equality of educational opportunities. From the perspective of the government itself, as most educational resources are within the government's control, how to effectively utilise educational resources and at the same time uphold the principles of fairness, allocating resources reasonably to needy areas, schools or students, so that the overall domestic educational resources are distributed with horizontal equity and vertical equity and with efficiency, is an important consideration in educational policy.

II. Current status of Taiwan compulsory education development and trend in resource allocation

The Taiwan compulsory education was officially rolled out in 1968, combining the original 6-year national schooling system with the 3-year system of primary middle school, collectively called the 9-year compulsory education system, with the beginning six years being elementary school, and the latter three years being secondary school. In its advancement up to 2008, there was an estimated 3,394—secondary and elementary schools, distributed among 25 prefectures/cities, with most of them set up according to the local population distribution, resulting in quite a large difference between the scale of the schools. In terms of the number of students, since the inception of the 9-year compulsory education, in compulsory elementary schools, the number of students has increased rapidly, reaching a peak in 1988; afterwards, with the effect of a fall in the birth rate of the population, the number of students decreased gradually. A similar situation can be seen from the development of the compulsory education; since reaching its peak in 1993, the number of students in

compulsory education has decreased year by year.

Compulsory education belongs to the national education stage, and the growth of Taiwanese educational funds is still respectable. In 2004, the overall public and private educational fund spending accounted for approximately 6% of GNP (Gross National Product); out of this figure, public educational fund spending accounted for 66% of the total educational spending, with compulsory education accounting for 39% of the total educational fund spending, and high school as well as professional education accounted for 20% of education spending, with higher education taking up 41% of education spending (Department of Education, 2009). Compulsory education funds accounted for a majority of the total education spending, mainly because of its nature of compulsory education. The 21st constitutional clause states: "Citizens have the right and duty to receive compulsory education"; furthermore, the 160th clause states: "Children of learning age between six to twelve years old, are all eligible for basic education, and are exempt from school fees. For the needy, the government shall provide book materials." Compulsory education goes by the principle of free schooling, therefore students' schooling fees throughout the learning period are mostly borne by the government. The extent of provision of funds for each student is relevant to the scale of the class level to which the student belongs. Starting from 2000, the Department of Education exercised the "small class, small school" policy, and lowering the amount of people in each classroom level becomes the main goal in educational resource allocation. The national average size of domestic elementary school has been historically displaying a downward trend, although there still exist differences among various regions (prefectures); regions with higher population concentration have bigger classroom scales, while regions with scattered population distribution have smaller scales, with Taipei City being the exception. Due to an abundance of financial resources, the classroom population in Taipei City is lower than those in other towns and regions. For the secondary school part, the scale of compulsory secondary school classrooms is slightly larger than that of the elementary schools, with the national average displaying a yearly downward trend nevertheless; but in 2004 this average showed an increase (38.7 persons), while in 2005 the number went down again to 36.1 persons. In general, the differences between the classroom scales of each prefecture and city are not as obvious as those applicable to elementary schools.

For the aforementioned classroom scales of each prefecture, in terms of the average value for whole prefectures (cities), within the same prefecture (city), the classroom scale among various schools is affected by the position of each school within the area, and the disparity is significantly huge. Furthermore, the scale of classroom size and the amount of educational funds have a close relationship; education is a labour-intensive industry, and compulsory education especially needs the infusion of a large number of teaching manpower. Currently, the set rules for compulsory education classroom teacher arrangement are as follows: 1.5 persons per classroom for elementary school, 2.0 persons for secondary school. At present the national average for teachers' service experience for elementary school is 11.8 years, and 12.1 years for secondary school (Department of Education).

The average amount of teaching periods for teachers is 18-19 sessions per week for elementary school homeroom teachers, and 22-23 periods per week for subject teachers; secondary school teachers have different number of sessions according to the subjects they teach, those who also take on homeroom duties have 13-16 sessions per week, while specialist teachers have 18-22 sessions weekly, although there are still disparities among the teaching duties for teachers in different prefectures and different school sizes. According to these calculations, in 2008, the teacher-student ratios stand at 16.7:1 for elementary school and 16.2:1 for secondary school. (Department of Education, 2009)

III. Cost input of students' families in Compulsory Education

Aside from the abovementioned government investigation of educational resources, the students' families' impact on the administration of students' education spending, along with social improvement its multi-faceted forms, has increased. On top of the previously mentioned government public funding on every compulsory education student's share, during the learning period most students' families will arrange after-class (external) guidance (tuition) and other activities, as well as purchase additional study tools and facilities; these expenses are considered essential spending for a student's study and should logically be calculated as a unit cost of studying.

The Taiwan Education Panel Survey set up by Taiwanese authorities announced that "An situational investigation into students' after-school guidance, tuition and home-based education' indicate, the percentage of secondary school students participating in subject guidance or home-based tuition reaches up to 72.9%, spending on average 4.3 hours per week on such activities. The ratio of the amount of teaching received by secondary school students inside and outside of schools in tuition is quite comparable. The number of tuition or supplementary class recipients corresponds to different locations; on average, the number of urban students participating in extra-curricular guidance exceeds those receiving the same in rural areas. Taking secondary school students as an example, in rural areas this number amounted to 70% (4 hours weekly on average); in suburban areas it stands at 71.1% (approximately 4 hours); in urban areas it reaches 74.4% (approximately 4.5 hours). Nevertheless, the proportion of students taking subject tuitions has reached 70% even in rural areas, showing that regardless of localities, students face enormous pressure to improve their studies. In addition, the percentage of elementary and secondary school students participating in daily after-class tuition outside schools stands at 43.52%, implying that for every 100 persons 44 persons participate in tuition outside school. The majority of tuition goers attend tuition for homework purposes (29.33%), followed by foreign languages (17.47%), and music/dance related topics (3.65%). The largest proportion of tuition goers consists of secondary school students (52.52%), followed by high school students at 46.40%. For schoolwork tuition, high school students take the crown (40.11%), followed accordingly by secondary school students (36.18%) and elementary school students (28.38%).

Comparing the average total educational costs for secondary school and elementary school students, it can be found that both hover around 5,100 US dollars, but with elementary school students having low public costs but high private costs, standing at 44% and 57% respectively. For secondary school students, the public costs are high while the private costs are low, at 52% and 48% respectively. Analysing the cause behind this, the attributing factor might be the difference between teacher allocation for secondary and elementary schools, causing that public costs for secondary schools to exceed those of elementary schools; while the rolling out of new subject programmes drove elementary school goers to necessarily partake in various extra-curricular

tuition, driving up the private costs; for secondary school goers, because their main goal is to gain promotion to upper levels, aside from the lessons provided in school, most of the tuition outside of schools consist mainly of curricular-related guidance, therefore the private costs of secondary school students are lower that those of elementary school students' (Chen et al, 2005).

IV. The exercise of Education Priority Area

Most of Taiwan's special education students are able to receive appropriate care in the commonly set up special education classes or special schools under the guarantee of "Special Education Law" passed earlier in 1984 and other relevant legal decrees. Under the recent "Indigenous Tribe Education Law" (set in 1998), students coming from indigenous tribes can also increase their priority standing in terms of their educational resource allocation. However, among normal students not belonging to the minorities or the biologically disadvantaged, there are in fact some that belong to the culturally disadvantaged. These include those: whose family income is overly low or unstable; those from single-parent families; those with cross-generation upbringing or coming from adoptive families; those whose age gap with parents are overly wide; those who live in overly far-out regions, or the children of mixed marriages et cetera. In the past, if these culturally disadvantaged students did not have the special attention of their homeroom teachers, the individual needs of students within a classroom of thirty-something students could easily be overlooked, so that they became weaker academically. Therefore, since 1995 Taiwan has started to practice "Plan for the Promotion of the Education Priority Area", addressing students from indigenous tribes, low-income community, those with cross-generation upbringing and students from single-parent (adoptive) families et cetera, and those staying within areas with inconvenient transport links, or regions with overly-high teacher turnover, diminishing population of learning age, regions where the youths' behaviour requires active guidance, and schools with lacking educational facilities et cetera. The government provides suitable support in various areas according to the corresponding support yardsticks, and these areas include: after-class lesson guidance, relative education, precinct-based educational activities, supporting the school to develop special attributes, charity work or out-of-island excursions or dormitories for teachers and students living far away, opening affiliated kindergarten for elementary schools, improving basic educational

facilities in schools, facilities for students' lunchtime, developing the cultural attributes of indigenous tribe education and maintain the good upkeep of facility equipments, locations for precinct-based activities, establishing transport vehicles to and from the school for students, as well as improving the school environment et cetera. Education Priority Area became a targeted plan to cater for the disadvantaged in the compulsory education phase, its funding is maintained at around 20 million US dollars. In addition, along with the rapidly changing society, many of the root solutions to various societal problems point to the Department of Education; they continue to provide various support for students in far-out suburbs, disadvantaged students, students from mixed marriage families, as well as those from families that are unable to provide appropriate activity channels after school.

It has been a whole fifteen years since the Education Priority Area plan was tested, then officially rolled out up till the present day. During that period of time there had been many instances of investigations and revisions done to the plan's directions and supplementary sections, so as to make the plan more holistic in execution, with more reasonable fund utilisation; the main points in exercising the plan are as follows:

- 1. In 1995 funding for supplementary type Education Priority Area plan amounted to 24 million US dollars, addressed issues include: "Areas that are epicentres for earthquakes and surrounding areas prone to earthquakes", "Areas with hollowed grounds", "Mountainous areas and areas outside the main island", "Differentiating the secondary school technical and artistic education centre" and "Reducing the class size while increasing the building of classes". These five areas (special issues) were provided with specialised funding support, used to improve the educational environment for the safety, hygiene and overall physical and mental health of teachers and students, as well as to create a conducive environmental conditions for education, in order to achieve the advancement of the goal of educational adequacy.
- 2. Following the identification experience of the Education Priority Area in 1995, since 1996, the Department of Education started to cautiously plan and expand the "Education Priority Area", setting ten criteria for the

designation of such areas. These ten criteria are: "Schools with a relatively high proportion of students from indigenous tribes and low-income families", "Schools outside of the main island or those with inconvenient transport links", "Schools with a relatively higher proportion of students with cross-generational upbringing or those from single parent families", "Schools with relatively low secondary school promotion levels", "Areas with active guidance for youths' adaptive behaviour", "Areas with seriously diminished population of learning age", "Schools with relatively high rates of teacher turnover (movement) or substitute teachers", "Areas with special or disadvantageous geographical conditions" and "Schools with insufficient basic educational facilities".

- 3. By the end of 1998, the first phase of this plan (1994-1998) was completed, in 1999 the contents for the first phase of the plan was scrutinised, studying the results of the exploration of study units and effectiveness of the plan from evaluation visits; according to the Department's arrangement of funds and set goals, a revision of the considerations for the criteria and supporting sections was conducted, eliminating "Schools with relatively low secondary school promotion rates", "Areas with special or disadvantageous geographical conditions" as well as "Schools with insufficient basic educational facilities", and retaining the other seven criteria.
- 4. Due to the effects of the 9/21earthquake in 2000, a portion of the funds was moved for rebuilding and refurbishment purposes, resulting in a halt of certain aspects of the programme. Gathering feedback and opinions from various rolled-out initiatives in the prefectures during 1991, the following set of revised principles were set: Number one, regarding the designation of criteria: (1) provision of funds to reduce the number of people and criteria threshold percentage (2) Reset and revise unclear criteria. Two, regarding the support programme section: According to the actual needs of the locale, the original eight supplementary programme sections are to be revised to ten sections, setting the order of priority of the programmes.
- 5. In 2003 the threshold criteria were lowered, including children of mixed marriages and eliminating "Areas with active guidance for youths' adaptive behaviour", at the same time adding the support programme "Furnishing basic school facilities".

6. In 2004 "Children of parents from mainland China" were included within the criteria list; at the same time, in keeping in line with the plan's ideology, so as to improve the academic competitiveness of minority students, a new support section, "Schools with a relatively high proportion of students with weaker learning abilities", was added.

- 7. In 2005, addressing the "Schools with a relatively higher proportion of students from indigenous tribes or low-income families" criterion, "low-income family students", given its different nature from indigenous tribe classification, was separated from the criterion and included within the "Schools with a higher proportion of students with cross-generational upbringing, those from single parent (adoptive) families, those where the age gap between family members and children is overly wide and those of foreign descent or children of mixed marriages or those of mainland Chinese" criterion.
- 8. Due to the specialised help accorded to children of foreign descent or mixed marriages, or those of mainland Chinese, only slight changes were made, eliminating the criterion of "Schools with a higher proportion of students with cross-generational upbringing, those from single parent (adoptive) families, those where the age gap between family members and children is overly wide and those of foreign descent or children of mixed marriages or those of mainland Chinese".
- 9. In 2007, there were no major scale revisions on the criteria aspect. The only matter was that after inspection of the support sections and learning guidance, it was found that they are similar in nature to the collaboration and extra-curricular plans laid out by the department. Hence, it was given some revisions, aiming to extract the greatest benefit from the limited funding under principles of equity and fairness. At the same time, the possibility for conducting learning guidance sessions during the winter and summer holidays were increased: such as funds for hiring external teachers when there is a lack of available teachers or arranging the pooling of societal resources.

10. In 2008, according to investigation results, the student recruitment criteria for general regions, city regions were revised and classified as: schools in general regions, city regions, and special or far-out regions, with more than 40% of students from indigenous tribes; on another note, the proportion of children from new immigrants keeps on increasing by the year, enforcing the new immigrant home-based education and developing the school's educational characteristics, providing children of new immigrants promptly with multi-faceted learning opportunities; therefore, the recruitment criteria for children of new immigrants were revised as: Schools with a higher proportion of students from low-income families, or with cross-generational upbringing, single parent (adoptive) families, those with wide age gap between parent and child, and children of new immigrants.

In recent years, under the trend of globalisation, there is a worldwide phenomenon of a widening gap between the rich and the poor as well as between urban and rural regions, and this became an inevitable fact. Taiwan is impacted by global trends; the educational problem of some regions with insufficient cultural resources, students from relative minorities, and those with disadvantaged learning are becoming more serious. Therefore, taking the topic of "Catering to the group of students with weaker academic capabilities" within the consideration for Education Priority Area, may balance the gap between urban and rural education, realising the ideology of "equality of education opportunities" and "principles of social justice", has become a focus of this plan.

V. Conclusion

From the aforementioned discussion and analysis, it can be known that since the commemoration of Taiwan's compulsory education in 1968, it has enforced the compulsory education policy with students going to school in general, with attendance levels and promotion levels reaching a certain standard; in order to maintain the operations of more than 3,300 elementary and secondary schools nationally, the educational resource allocation has been quite significant. However, with the high numbers of students in compulsory education, in addition to the general distribution of schools all over the nation, the educational resources received by students differ according to regions, prefectures, school size and family backgrounds. The costs for compulsory education

students vary according to their prefecture of residence, school size, and condition of towns or villages; in urban regions, due to the larger scale of classrooms in bigger schools, the public costs for students are lowered, although the tuition fees expensed by the family and other private costs are high in contrast; due to the small sizes of classroom in small schools within rural areas, the public costs are comparable; however, there is very limited private costs or family expenses, resulting in a marked difference between urban and rural areas.

Along with the development of the society and economy, education disparity is already an inevitable state of affairs; governmental forces need to intervene using various regulatory policies, balancing out unequal conditions, one of the most important solutions being the establishment of a set of mediating educational finance system. Examining the overall domestic relevant decrees regarding the realm of compulsory education resource allocation, first and foremost, with the concept of "horizontal equity", expenses are allocated equally on average according to a specific set of standards, while utilising the concept of education financial equity, "vertical equity", as illustrated in this essay, on students, schools and regions with special needs, in order to provide more resources to the disadvantaged; in other words, "active disparity treatment". As for calculating different levels of school education funds and basic needs and the various allocations for different regional governments, maintaining its funding to achieve a certain standard, is the culmination of the first conceptual phase of the allocation of educational resources based on "adequacy". However, among the 2.8 million compulsory education students in the nation, there are still those that are affected by their localities, family backgrounds, school and societal conditions as well as other elements, resulting in certain disparities, such that in the future, the allocation of compulsory education resources aims to complete the following:

1. In terms of horizontal equity

Currently, although the allocation method undertaken by the central towards the regional governments use basic requirements as the standard of calculation, the conditions between each prefectures can be overly ambiguous; in addition to the differences in financial prowess, this situation results in schools and students in various prefectures and regions receiving significant differences in terms of educational resources. In particular,

the relationship between teacher fees and classroom sizes directly affects the funds for each student. For far-out suburbs or village regions, and prefectures with lower financial clout, as well as industrially less developed areas, the schools and classroom sizes would surely be smaller as compared with city regions, those with better financial status and within more commercially developed areas. As a consequence students in the former group have higher education funds on average; yet this cannot be seen as proof that the education quality of suburban areas is better than that of urban areas, and especially it should not cause the merging of smaller schools to curb resource wastage in the outskirts. In the future, there remains to be seen revisions in the formula to enhance the rights of disadvantageous regions to improve horizontal equity.

2. In terms of vertical equity

At the moment, the specific educational support being carried out is run in accordance with the administrative authorities' agenda, rolled out through various aid plans. The compulsory education phase has continued to roll out programmes catering to the care of disadvantaged elementary and secondary school goers in recent years; it can be seen as being the focus of the government towards the care of the disadvantaged, and can also reflect the increase in numbers of disadvantaged students and limited resources. Ultimately, the problems of family and societal issues behind the backgrounds of disadvantaged students that can be solved through aid programmes cannot be done so through resource support alone. In addition, these set support plans are announced year by year, with yearly investigative methods, such that the uncertainty of the plan is high, resulting in the wastage of funds throughout the year. Furthermore, with the varied social forms, a variety of beneficiary entities have arisen, resulting in aggressive competition for resources. In the future, the issue of vertical equity should discuss the designation of disadvantaged groups on many levels and have priorities set as well, while enforcing the integration of support plans and various resources among administrative bodies, so as to prevent repetitive aids or unequal distribution, in order to truly care for students who need the most help.

3. In terms of adequacy

The consideration for adequacy in domestic resource allocation policy is still anchored at the first phase of definition, "the provision of the minimum level of resources"; in response to changing to the trend to emphasising the responsibility for efficient results, in the future the second and third phases of meanings for

adequacy should be highlighted, not only adjusting resource allocation according to school rankings and individual student characteristics, but also ensuring that the resources are adequate for supporting students to express their potential to achieve preset learning achievements or standards. Therefore, various support plans should complement the consideration for effective results, especially with regard to various student achievements and states of improvement.

Reference:

Berne, R., & Stiefel, L. (1984). The Measurement of Equity in School Finance:

Conceptual, Methodological, and Empirical Dimension. Baltimore: The Johns Hopkins University Press.

Berne, R., & Stiefel, L. (1999). Concepts of school finance equity: 1970 to the present.

In H. F. Ladd, R. Chalk, & J. S. Hansen (Eds.), Equity and Adequacy in

Education Finance: Issues and Perspectives (pp. 7-33). Washington, DC: National Academy Press.

Clune, W. H. (1994). The shift from equity to adequacy in school finance.

Educational Policy, 8(4), 374-394.

Conley, D. & Picus, L. (2003) Oregon's quality education model: linking adequacy and outcomes. *Educational Policy*, 17(5), 586-612.

Goertz, M. E. (1994). Program equity and adequacy: Issues from the field.

Educational Policy, 8(4), 608-615.

Gutherie, J. W., & Rothstein, R. (1999). Enabling adequacy to achieve reality:

Translating adequacy into state school finance distribution arrangements. In H. F. Ladd, R. Chalk, & J. S.

Hansen (Eds), Equity and Adequacy in

Education Finance: Issues and Perspectives (pp. 209-259). Washington, DC: National Academy Press.

King, R. A., Swanson, A. D., & Sweetland, S. R. (2003). *School Finance: Achieving High Standards with Equity and Efficiency* (3rd ed.). Boston: Allyn and Bacon.

Odden, A., & Busch, C. (1998). Financing Schools for High Performance. San Francisco: Jossey-Bass.

Odden, A. R., & Picus, L. O. (2000). School Financing: A Policy Perspective. New York: McGraw-Hill.