A Policy Study of China’s Western Higher Education Development Plan

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Abstract

China’s higher education system has been experiencing imbalanced development in the sense that the western region is obviously lagging behind. In order to adjust this imbalance, China’s Western Higher Education Development Plan (CWHEDP) was implemented by the central government in 2000. The purpose of this study is to analyze to what extent the CWHEDP policy has worked and what factors have possibly influenced the implementation of the policy. In order to determine these, the study analyzes the implementation process of CWHEDP, as well as exploring the possible connection between the change in the performance of the western region’s higher education and the policy.

The study utilizes both quantitative and qualitative methods. Official statistical data analysis is conducted in order to examine the change in performance of the western region’s higher education system. In order to analyze the policy’s implementation and explore the linkage between performance and policy, a case study of three provinces in the western region is conducted.

The results of the study indicate that three factors could be influential to CWHEDP’s implementation process: policy standards and objectives, inter-organizational communication and regulation for accountability and supervision, and disposition of implementers. Among these three, the disposition of implementers could be the most important one. In addition, there is an assumption that CWHEDP might not contribute much to higher education development in the western region despite the fact that higher education conditions have improved considerably since the implementation of CWHEDP.
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### Abbreviations

<table>
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CNY</td>
<td>Chinese Yuan Renminbi: The currency of China</td>
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<tr>
<td>CWDP</td>
<td>China’s Western Development Plan (Xi Bu Da Kai Fa)</td>
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<tr>
<td>CWHEDP</td>
<td>China’s Western Higher Education Development Plan</td>
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<tr>
<td>HEIs</td>
<td>Higher Education Institutions</td>
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Chapter 1: Introduction

This thesis is a policy study of China’s Western Higher Education Development Plan (CWHEDP), which was initialized in 2000 by the central government of China. The policy was designed to improve the higher education conditions of China’s western region, which has traditionally lagged behind other regions of China not only in higher education but also in other social and economic areas. This thesis first analyzes the patterns of change in the western region’s higher education conditions after CWHEDP’s implementation, and then investigates several factors of the policy’s implementation process by following a case study of the Provincial Five Year Higher Education Plan, an inheritance of CWHEDP on the provincial level. The author expects to determine whether there is a link between the policy and the changes in higher education performance, thereby analyzing the factors that possibly influence the implementation process of CWHEDP.

1.1 The policy and the time period of the analysis

China’s Western Higher Education Development Plan (CWHEDP) is a part of China’s Western Development Plan (CWDP), latter was implemented by the central government in 2000 to narrow the economical and social gap between the western region and other regions of China. This analysis will begin with the first ten years of the CWHEDP’s implementation (2001-2010). Within these ten years, the latter half (2006-2010) will be the main focus of the investigation and discussion. The reasons for choosing this five-year period are as follows.

China’s economic and social development has been following a set of policy initiatives called the Five Year Plan since 1950 as the major policy instrument. Thus, five years is considered one cycle of policy implementation. Communist Party of China (CPC) conducted The Tenth Five Year Plan from 2001 to 2005 and The Eleventh Five Year Plan from 2006 to 2010. The Twelfth Five Year Plan began in 2011 and will continue to be implemented until 2015. The author expects the investigation to be more complete when it follows complete, five-year cycles.

1 Source: News of Communist Party of China (CPC) 
http://dangshi.people.com.cn/GB/151935/204121/
The latter half of the ten years is the main focus of this investigation and discussion, because the difference of changes between the western region and other regions was small from 2001 to 2006. The author discovered this pattern while conducting an analysis on the official statistical data (see Chapter 5). In contrast, the difference in regions is much more visible during the period from 2006 to 2010. In order to perform a better analysis on the relationship between change patterns and policy, the author chooses to concentrate on the second half of the period, which coordinates with the time period of The Eleventh Five Year Plan.

The Provincial Five Year Higher Education Plan of the western region is a combination of the national Five Year Plan and China’s Western Higher Education Development Plan (CWHEDP). In other words, each province has its own Five Year Plan that implements the national policies on the local level. Thus, the policy study of this thesis will begin on the national (regional) level and move to the local (provincial) level.

1.2 Reasons for choosing this topic

This topic is interesting for several reasons. First of all, China’s political system is more distinguished than that of many other countries, because China has a highly centralized system of government. Thus, the power of policy making is mainly concentrated in the central government (Li, 2004). A study of Chinese policy making will also help us to understand how China’s political systems work as well as how those systems are internally linked or how they differ. China’s Western Development Plan (CWDP) is an important and long-term policy that has affected a large portion of the western region in recent years. Therefore, it is interesting to use this policy as a case study to contribute to the field of Chinese policy studies.

Secondly, in order to narrow the social and economic gap between the western region and other regions of China, China’s Western Development Plan (CWDP) consists of a large number of policies that cover many social and economic factors from the development of agriculture and industry to the development of education and culture.²

² Source: http://xinhuanet.com/
After the implementation of CWDP, a lot of economic and social changes in the western region appeared in the official statistics. The region’s economic growth has been especially augmented since the plan’s implementation (Zuo and Zhu, 2010). As a result, the environment of higher education in the western region is changing. Thus, studying the CWHEDP policy should elucidate to what extent the CWDP policy works, and CWDP is a very important policy in terms of promoting the economic development of the whole country.

Thirdly, after the end of the Cultural Revolution (1966-1976), China’s higher education has been undergoing recovery and rapid development since 1978. In 1999, the Ministry of Education published a new policy called “21st Century Action Plan for Revitalizing Education” with the intent of providing political, social, and financial support to expand greatly the region’s enrollment in higher education. As a result, higher education enrollment increased by 42 percent in 1999.

Before CWHEDP’s implementation, higher education in the western region had traditionally lagged behind other regions. In the mean time, the entire country’s higher education is developing quickly. Hence it would be interesting to see whether the gap between the western region and other regions is shrinking. It would also be informative to discover the reasons for this result and whether those reasons can reveal the factors that influence policy’s implementation.

Fourthly, studying the “Five Year Higher Education Plan” in three provinces in the western region would reveal how CWHEDP is functioning at the local level. Although every province is under the central government’s administration, policies may evolve in different directions during implementation at the local level. It would be interesting to compare the three provinces to see whether diverging patterns exists within the western region and why they exist if they do. The analysis will also provide some

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4 Cultural Revolution: a political movement that was led by President Mao Zedong from May 1966 to October 1976. The movement was considered a disaster in China’s history, which severely held back the development of China’s education. Higher education entrance examination was cancelled, so no one went to higher education after secondary education during the revolution. (Xinhua Net: [http://news.xinhuanet.com/ziliao/2003-01/20/content_697889.htm](http://news.xinhuanet.com/ziliao/2003-01/20/content_697889.htm))

information about how central policy works at the local level in China.

Finally, the analytic framework that is used in this thesis was introduced by Van Meter and Van Horn in their study “The Policy Implementation Process; A Conceptual Framework” (1975). They introduced this framework mainly into the context of western countries. China’s political system differs a lot from that of western countries, so it would be interesting to see if this framework works in the Chinese context.

1.3 Procedure for conducting the research

The main objective of this study is to investigate the extent to which CWHEDP has influenced the higher education condition in the western region, and the possible reasons for the result. It will analyze the change in performance in western higher education and the implementation process of CWHEDP.

In order to study these higher education policies, knowledge of the background of China’s higher education system and China’s policy implementation process is essential. Therefore, we need to know what the characteristics of China’s higher education system are and what the characteristics are of China’s policy implementation process that have already been identified by other authors. In addition, how will the condition of higher education in the western region change? The following analysis of changing conditions will be at both the national (regional) level and the local (provincial) level.

After establishing the picture of condition change in western higher education, a related set of questions will be answered. Does the result link to the implementation of CWHEDP? If it does, then what factors could be influencing the result? If not, then what are the possible reasons why it has not affected higher education?

Therefore, the formulation of the research questions is as follows.
1. What are the main characteristics of China’s policy implementation process in general?
2. How did the higher education conditions change in western region, and the three selected provinces (Qinghai, Yunnan, and Inner Mongolia) after the implementation
of the CWHEDP policy?
3. To what extent did the CWHEDP policy work? How can the result be explained?

1.4 Limitations of this thesis

The time and scale of a master’s thesis places limitations on the present research.

The data from the analysis of national statistics are not always complete or consistent across sectors. Sometimes, the data from a certain year are not available, so the author substitutes data from the closest possible year. Since the main purpose of a data analysis is observing patterns of change, a few nearly equivalent substitutes usually do not affect the change pattern.

The author chooses several indicators for higher education performance that are both important and available. However, the pattern that these indicators show can only say something about the performance, not the whole picture. There are also other important indicators that are not accessible due to limitations in the time and scale of this thesis.

In terms of the six variables from Van Meter and Van Horn’s (1975) policy implementation process model, the case study of the three provinces discusses a part of every variable. However, it does not cover every aspect of each variable. A complete and detailed discussion of each variable would involve thorough fieldwork in each of the provinces so that the researchers could follow the implementation process. The same recommendation applies to the performance analysis. Due to the limitation of the academic sources that can be obtained within a short time, the author can evaluate only some parts of the performance. A more complete valuation of the performance would require a more detailed investigation into each higher education sector. Moreover, the hypothesized causal link that the author made in the end of the analysis remains hypothetical, because thorough and detailed fieldwork into each of the three provinces would be necessary to make a strong statement of causality. The investigation should follow the policy implementation process from the level of policy implementers to the level of institutions where the changes actually take place. All of these recommendations require a longer-term and larger-scale project, which
can be done in the future.

1.5 Structure of this thesis

Chapter 2 presents the analytical framework that was introduced by Van Meter and Van Horn (1975). Their model for analyzing the implementation process consists of six variables: policy standards and objectives, policy resources, inter-organizational communication and enforcement activities, the characteristics of the implementing agencies, the economic, social, and political environment that affects the jurisdiction or galvanization within which implementation takes place, and the disposition of the implementers. Moreover, a theory of three general explanations for failed policy implementations (Kaufman, 1973: 2) will be combined with these six variables to serve as the discussion’s theoretical basis. Moreover, the characteristics of China’s policy implementation process and the expectation for this study are also discussed.

Chapter 3 presents the methodology of this thesis. The choice of research strategy, research design, and research method are discussed. The choice of case study and reliability, replication and validity of the data are also discussed.

Chapter 4 presents background knowledge of China’s higher education system and an introduction of the CWHEDP policy.

Chapter 5 presents the analysis of the change of higher education condition in western region and discusses the possible link between those changes and the CWHEDP policy. If there is link, how can the link be explained? Thereafter, the factors that might influence the implementation of the policy is also discussed.

Finally, Chapter 6 presents the conclusions of the study.
Chapter 2: Analytical framework

This chapter discusses the choice of the analytical framework for this study. When choosing the framework, the author took the characteristics of China’s political system into consideration. In addition, the author also discusses the expectations for the findings according to this framework.

2.1 Understanding policy process

In order to study policy, it is necessary to understand the whole policy process. Scholars have been changing the way to model policy process over the years. According to Gornitzka et al. (2002) and Cerych and Sabatier (1992), a centralized, policy-driven reform process can be divided into three, distinct phases: policy formulation, policy implementation, and policy evaluation.

Jann and Kai (2003: 48) explain policy formulation:

Policy formulation and adoption includes the definition of objectives—what should be achieved with the policy—and the consideration of different action alternatives.

Policy implementation, as O’Toole (2000: 266) defines it, is:

What happens between the establishment of an apparent intention on the part of the government to do something, or to stop doing something, and the ultimate impact in the world of action.

Danielson (2007: 386) explained policy evaluation as follows:

If we implement X program, will Y outcome result (or, in the case of a program already implemented: did X program produce Y outcome that we envisioned)? Policy evaluation is fundamentally a testing of means.

According to the above definitions, the author concludes that implementation is the important link between policy and performance. However, the importance of studying implementation processes has been overlooked by many authors (Van Meter and Van Horn, 1975), as we can see in claims like this one: “once a policy has been ‘made’ by a government, the policy will be implemented and the desired results of the policy
will be near those expected by the policy-makers” (Smith, 1973: 197-198). As Van Meter and Van Horn mentioned (1975: 450):

The implementation process is assumed to be a series of mundane decisions and interactions unworthy of the attention of scholars seeking the heady stuff of politics. Implementation is deceptively simple; it does not appear to involve any great issues. Most of the crucial policy issues are often seen to have been resolved in the prior decisions of executives, legislators, and judges.

However, in reality, policy results do not always match expectations because of the distortions in the process of policy implementation. Some argue that this type of distortion cannot be avoided because of the inevitable ambiguities of policy goals and conflicts among implementers (Matland, 1995; Pressman and Wildavsky, 1973; Stoker, 1991). Therefore, studying the implementation process will help us to understand the reasons for the inconsistency between policy goals and policy results.

Knowing the key elements of the implementation process is the first step to studying a complex process such as policy implementation. According to Jann and Kai (2003: 52):

An ideal process of policy implementation would include the following core elements:

- Specification of program details (i.e., how and by which agencies/organizations should the program be executed? How should the law/program be interpreted?);
- Allocation of resources (i.e., how are budgets distributed? Which personnel will execute the program? Which units of an organization will be in charge of the execution?); and
- Decisions (i.e., how will decisions of single cases be carried out?)

The next step of policy analysis is identifying the possible factors that influence the process. Many authors have contributed to the identification of key factors. In his article, “Policy Design and Implementation,” May (2003: 224) wrote:

Implementation of the policy is limited by key attributes of policies (that is, lack of goal clarity and inconsistency in goals), complex chains of implementing actions and indirect control (multiple actors, decision points and levels of action), and by other non-statutory factors (such as problem intractability, unsupportive political environments).

Other authors also argue that political forces that form policy design also have great influence on policy implementation (Bardach, 1977; Brodkin, 1990; Nakamura and
However, analyzing whether the key factors have influenced the implementation process in reality as well as assessing the policy’s results is challenging because the changes that occurred during the implementation process are usually difficult to operationalize (Gornitzka, Kyvik, and Stensaker, 2005). In their work about reform in Norwegian universities (2000: 307), Bleiklie, Høstaker, and Vabø explained:

Changes that have taken place were not the outcome of political reforms alone. They should be considered part of more comprehensive demographic, socio-structural and political-institutional processes of change. Within this context the reforms have been both the driving forces behind and the responses to change.

This certainly makes policy implementation difficult to study. Hence, the author needs to identify changes and find a suitable model to link policy and performance with key influential factors in order to begin this policy study.

2.2 Features of policy implementation in China

Lin mentioned two types of characteristics of China’s social policy implementation process in his study “Strategy in the Process of Social Policy Implementation” (2005). First, central government of the Communist Party is in charge of policy formulation and local governments are in charge of policy implementation. These two are independent of each other. Second, the policy might change to a certain extent during the implementation process, and this change is usually called “policy adaption” or “policy interaction.” Society usually finds this type of change acceptable to a limited degree.

Majone and Wildavsky mentioned a similar view in their work, “Implementation as Evolution” (1978):

Implementation is evolution. Since it takes place in a world we never made, we are usually in the middle of the process, with events having occurred before and (we hope) continuing afterward. At each point we must cope with new circumstances that allow us to actualize different potentials in whatever policy ideas we are implementing. When we act to implement a policy, we change it.
Gornitzka, Kyvik, and Stensaker (2005) summarize similar views that have been presented by other researchers: “Implementation thus often implies the carrying out of goals as well as the reformulation and re-design of original intentions and plans. Implementation in this sense has also been conceptualized as ‘mutual adaptation’ (Browne and Wildavsky, 1984a) and a ‘learning process’ (Browne and Wildavsky, 1984b), and implementation as ‘negotiation and interaction’ (Barrett and Fudge, 1981).”

China is an administrative society, so almost all of the party’s organizations, mass groups, enterprises, institutions, and legislative and judicial institutions should be established and managed according to the nation’s administrative organization principles, structures, and criterion values. Thus, all of the nation’s organized units become a whole system of policy implementation organization and are connected to each other (Lin, 2005). In a way, this type of policy implementation is good for the policy’s spread and recognition; however, the communication channel for the policy can eventually change the policy completely from its original form.

On the basis of the study “The Obstacle and Strategy towards China’s Public Policy’s Implementation Process” by Li (2004), the author draws conclusions about the common problems of policy implementation in China from the four following angles.

1) Political system
China operates under a highly centralized system of government. Thus, the power of policy making is mainly concentrated in the central government. Most policies are implemented through a political chain of various levels of administrative agencies. In the mean time, China has been experiencing rapid economical and social development ever since the implementation of the “Reform and Opening” policy in 1978. In this context, the social differentiation level was growing higher while the differences in the performances across regions and industries were also increasing. As a result, the central government is struggling more and more to formulate a unified policy and to conduct unified management. The unified means of governmental administration do not meet the needs of the rapidly developing society’s needs. Thus, the central government has distributed part of the power of policy making and policy adjusting to local governments, such as provincial governments, city governments, and other,
smaller entities. However, during this process of power redistribution, the division of policy authority and policy responsibility between the central government and local governments has sometimes been unclear or unreasonable. In response to this ambiguity, local governments sometimes change or delete parts of the central policy in order to meet the needs of the local society, leading to the distortion of central policy.

2) Policy itself
In order to create a general plan for a large population, the central government sometimes words its central policy abstractly and vaguely. For example, the expressions “in principle” and “should” are used a lot. Furthermore, some policymakers use numerous obscure and difficult expressions in the policy content, which makes the policy even more difficult to understand. However, the policymakers are not the only ones who are at fault for the central policy’s ambiguity. In China, many public policies are facing the problem of a general matter instead of a simple reality problem with a clear boundary. Moreover, due to the flaws in the procedures and regulations of the Chinese policymaking system itself, many vaguely expressed policies were published. As a result, many policies may be understood and implemented in a far different way from the original intent during the implementation process.

3) Policy implementers
China’s policy implementation process includes a relatively extensive space for policy executors to abuse their power in order to realize their own benefit. They usually end up making their own versions of policies by twisting and deleting content in the original policies. This behavior hinders the policy implementation and harms the public authority of the whole political system. Ultimately, it harms the future implementation of any policy.

4) Regulation of accountability and of the supervision system
Governmental officials are the ones who are responsible for the process of policymaking and policy implementation. Thus, they are the ones who should obey the political rules regarding their usage of political power. Thus, the regulation of accountability and supervision is necessary for better regulation of the officials’
activities. However, such regulation is not well established in China, yet, encouraging the abuse of power to a great extent.

2.3 Choice of analytical framework

The model that was introduced by Van Meter and Van Horn (1975) serves as this thesis’ analytical framework. This model will help the author to link policy with performance. The author also identified six variables as influential factors in the implementation process: policy standards and objectives; policy resources; inter-organizational communication and enforcement activities; the characteristics of the implementing agencies; the economic, social, and political environment where the implementation takes place; and the disposition of the implementers.

Bovens et al. (2004: 4) held the viewpoint that one should not expect the government in democratic countries to be the big fixer or the all-powerful state, because such a government is only part of the picture in the sense that things like capital markets, big businesses, the Web, and mobile citizens cannot be shaped at will by policy makers. However, the centralization of power in the Chinese government enables it to control more factors in public policy’s implementation, so the surrounding environment can be less influential over implementation. Therefore, to create the analytical framework of this thesis, the author chooses Van Horn and Van Meter’s (1975) model, because it assumes a relatively straightforward linkage between performance and policy through several variables. The author assumes that this model is suitable for analyzing Chinese policies, because the country’s relatively centralized governmental power prevents interference in the policy’s implementation process. Although this model is based on western countries, the variables are similar to the common problems in China’s policy implementation process (Li, 2004).
Van Meter and Van Horn (1975) gave specific explanations of each variable.

1) Policy standards and objectives
The ultimate purpose of this model is to establish a link between policy and performance. The way to measure performance is to assess to what extent the performance met the original goals of the policy, namely, policy standards and objectives. Hence, Van Meter and Van Horn consider policy standards and objectives indicators of performance.

In some cases, performance is easily identified and measured, although it is usually not. Van Meter and Van Horn (1975: 464) suggested that this difficulty “may be due to the program’s breadth or the complex and far-reaching nature of its goals. It may also be a consequence of ambiguities and contradictions in the statement of standards and objectives.” Van Meter and Van Horn also suggested that policymakers sometimes decide to make standards and objectives ambiguous to ensure a positive response from other levels of policy implementers and responsible parties.

Anyhow, identifying and measuring policy standards and objectives is the first essential step. According to Van Meter and Van Horn’s suggestion (1975: 464), “in
determining standards and objectives one could use the statements of policy makers, as reflected in numerous documents such as program regulations and guidelines which spell out the criteria for an evaluation of policy performance.”

2) Policy resources
In addition to standards and objectives, a policy also provides resources for implementers to utilize. Such policy resources usually include funds or other incentives that might encourage or equip the implementation. However, Van Meter and Van Horn (1975) explained that the funds end up being inadequate in most cases, so the major reason for the failure of a policy is sometimes the inadequate supply of governmental incentives.

3) Inter-organizational communication and enforcement activities
How well the implementers understand the policy’s standards and objectives is important to a success implementation. Therefore, clear standards and objectives of policy are important as well as good communication between the implementers. Accuracy and consistency are important in terms of communication, even though the communication process is usually complex, and distortion inevitably happens both intentionally and unintentionally.

Therefore, an action-forcing mechanism may be necessary for a successful implementation.

In the context of interorganizational (or intergovernmental) relations, two types of enforcement or follow-up activities are most important. First, technical advice and assistance can be provided. Second, superiors (or federal officials) can rely on a wide variety of sanctions – both positive and negative. (Van Meter and Van Horn, 1975: 467)

In order to realize these two types of activities, a government needs a set of reliable forms of surveillance, such as “on-site visitations, program evaluations, administrative and management reviews, audits, and other feedback mechanisms – including reports by nongovernmental advisory committees set up to oversee state and local governmental units” (Van Meter and Van Horn, 1975: 469).

4) Characteristics of the implementing agencies
The sufficient capacity of the implementing agency is vital to successful implementation. The elements that may have an impact on an agency’s capacity are the size and work capacity of an agency’s staff; the hierarchical control degree among implementing agencies; the political support that the agency receives from legislators and executives; the agency’s functioning condition; the openness and freedom of the communication inside and outside the agency; and the formal or informal connection between the agency and policymakers.

5) Economic, social, and political conditions
The following elements of economic, social, and political conditions have potential impact on policy implementation: whether the economic resources are sufficient to support the implementation of the policy; the policy’s influence over local economic and social conditions; the role of public opinion in policy issue; the elites’ opinions about the implementation of the policy; the opinions of political parties; and the opinions of private interest groups on the implementation of the policy.

6) Disposition of implementers
The perceptions of the implementer towards the policy are very important because the implementers have jurisdiction over the policy’s delivery.

Van Meter and Van Horn (1975: 472) concluded that the implementers’ response includes three elements that may affect the implementers’ ability and willingness to carry out the policy: “their cognition (comprehension, understanding) of the policy, the direction of their response toward it (acceptance, neutrality, rejection), and the intensity of that response.”

To link these variables in the model, Van Meter and Van Horn propose the following hypothesis. Policy standards and objectives have an indirect effect on performance. This effect is realized through the mediation of other variables. Firstly, standards and objectives indirectly affect the disposition of implementers through interorganizational communication activities. The performance will be judged in the end by the initial standards and objectives of the policy. Therefore, implementers’ perception of the policy will be influenced by their understanding of policy’s standards and objectives. Good interorganizational communication activities may
contribute to the positive disposition of implementers. Secondly, policy standards and objectives also have an indirect impact on the disposition of implementers through enforcement activities. The standards and objectives of the policy provide the foundations in which enforcement activities are embedded. For example, “standards and objectives may establish limits on the sanctions that can be employed legitimately by superiors; and they help define the amount of discretion afforded by implementing agencies” (Van Meter and Van Horn, 1975: 475). Enforcement activities may change implementers’ perceptions of the policy by showing either the positive side of fulfilling the tasks or the negative side of not fulfilling the tasks.

Policy resources link to three other variables. Firstly, type and amount of the available resources will impact interorganizational communication and enforcement activities. A variety of enforcement activities can be realized only if there are sufficient resources. Similarly, the disposition of implementers can also be affected by the availability of resources. implementers will be encouraged by sufficient resources or discouraged by the lack of resources. Thirdly, policy resources also link to the economic, social, and political environment of the implementing organization. The resources that are provided may compel private citizens and organized interest groups to demand a successful implementation. The available resources may also attract participation from individuals and groups. On the other hand, limited resources may engender a negative response from private citizens and organized interest groups.

The economic, social and political environment of the implementing organization will also impact the character of the implementing agencies, the dispositions of implementers, and the performance itself. “Environmental conditions can have a significant effect on the willingness and capacity of a jurisdiction (or organization) to support well-developed bureaucratic structures, the vitality and expertise found in administrative agencies, as well as the level of political support enjoyed by an agency” (Van Meter and Van Horn, 1975: 476). In terms of the dispositions of implementers, environment can have both positive and negative influences. If the problem is severe, and the citizens and interest groups show support, then the implementers are more likely to have a positive attitude towards the policy; if not, then their attitude will more likely be negative. Moreover, the environment may also have a direct impact on performance itself, because the performance cannot be
The characteristics of the implementing agencies also affect the dispositions of implementers. Indeed, “The nature of the communications network, the degree of hierarchical control, and the style of leadership can influence the individual’s identification with the organization’s goals and objectives, either facilitating or hindering effective implementation depending on the orientation of the implementing agency” (Van Meter and Van Horn, 1975: 477).

Interorganizational communication and enforcement activities and the characteristics of implementing agencies have a two-way impact on each other. The nature of implementing agencies, including their hierarchical degree and communication, will influence enforcement activities such as technical advice and follow-up activities. Fortunately, enforcement activities “can provide the implementing agencies with added vitality and expertise-improving their capacity to execute programs. They can also be a source of political support which can facilitate effective implementation” (Van Meter and Van Horn, 1975: 477).

In the end, the characteristics of the implementing agencies – the economic, social and political environment where implementation takes place – and the disposition of the implementers are the variables that will have a direct impact on performance.

2.3 Theory based on the model

Kaufman’s (1973: 2) theory of three general explanations for a failed policy implementation will be used as the theoretical basis for this thesis. Van Meter and Van Horn (1975) linked these three general explanations with their six variables.

The three explanations are as follows:

1) The communications process

How the implementers understand and communicate the policy influences policy implementation. Four components in the model pertain to the communications process: policy standards and objectives; interorganizational communication and enforcement activities; the characteristics of the implementing agency; and the
dispositions of the implementers. Some studies show that a lack of accuracy and consistency in policy inheritance and the problems in communication contribute partly to the failure of performance.

2) The capability problem
Whether the policy can be successfully implemented is also a matter of the implementing organization’s capability. Four components in the model relate to this explanation: policy resources; interorganizational communication and enforcement activities; characteristics of the implementing agencies; and the economic, social, and political environment. Studies have already shown a direct link between the poor capability of the implementers and the failure of the program.

3) Dispositional conflicts
Finally, the implementers’ perceptions of the policy can have a direct impact on the performance. A program could fail because the implementers had refused to do their jobs. Four components of the model contribute to the implementers’ possible dispositional conflicts: policy resources; interorganizational communication and enforcement activities; characteristics of the implementing agency; and the economic, social, and political environment of the implementing organization.

The link between the six variables and performance that Van Meter and Van Horn established is better competence in the six variables implies better performance.

2.5 Expectations for China’s case
On the basis of the analytical model and theory, the hypothesis for China’s case is that the communications process and capability may be the two largest determinants of performance. In terms of communication process, China’s complex and centralized political system and massive governmental agencies could contribute to effective enforcement activities, but they may also inhibit efficient communication between different agencies. A few conflicts of interest between different parties could contribute to more positive dispositions of implementers. In terms of capability, China’s centralized government has the most power to implement certain policies. Society’s participation in politics is still relatively limited, which gives implementers
more freedom to fulfill their roles as they see fit. The funds and political support from the central government are noticeable in China’s Western Development Plan (CWDP). Hence, the author assumes that the implementation of CWDP does not suffer greatly from a lack of resources. However, whether resources are sufficient should be a big part of the capability problem.

In China’s case, the author assumes that dispositional conflicts may also contribute somewhat to the performance. In addition to the implementers’ power and freedom to make decisions, whether the problem that is meant to be solved by a given policy is urgent in the local area may influence implementers’ perceptions on the policy. Hence, the environmental elements may contribute to potential dispositional conflicts among implementers due to their different perceptions of which problem is the most urgent.
Chapter 3: Methodology

In this chapter, the author talks about the choice of research strategy, research design, and research method. Moreover, the reason for choosing the specific provinces for the case study is explained. In the end, the author talks about the reliability, replication and validity of the data.

3.1 Research strategy
This thesis will be using both the qualitative and quantitative research methods. As Bryman (2008: 22) defined: quantitative research “emphasizes quantification in the collection and analysis of data,” while qualitative research in contrast “emphasize[s] words rather than quantification in the collection and analysis of data.”

The reason for choosing the combination of the two methods is that, due to the nature of this policy study, the author wants to identify the change pattern that is derived from official statistics and also look for the potential linkage between the CWDP policy and this change pattern. In order to identify the change pattern, a quantitative data analysis will be necessary. As for trying to look for the internal linkage between the policy and the change pattern, a qualitative analysis, which seeks for the logical reasons for certain outcomes, will be necessary.

3.2 Case study research design
This thesis will involve a case study on three selected provinces’ implementation of The Eleventh Five Year Higher Education Plan. As it has already been mentioned in Chapter 1.1 The policy and the time period of the analysis, provincial Five Year Higher Education Plan of the western region is an inheritance of both the national Five Year Plan and CWHEDP. Each province has its own Five Year Plan, which implements the national policies on a local level.

Due to the size and population of the western region of China, conducting an overall research on the whole region would be unrealistic for a master’s thesis. Therefore, a case study choice would be more sensible. A case study can also say something about
the condition of the whole region, especially when the choice of the case is representative of the entire region. In this thesis, the author chooses the provinces of Inner Mongolia, Yunnan, and Qinghai. The reason for this choice is that these three provinces are representative to a certain extent. The explanations will be discussed next.

3.3 Reasons for choosing these three provinces

Three provinces in the western region of China are selected as the areas of the case study. The three provinces are Inner Mongolia, Qinghai, and Yunnan. There are two reasons for choosing these three provinces:

1) These three provinces are geographically remote from each other. Therefore, the three provinces have very different ethnical cultures, geographical features, and distribution of population, etc. The diversity of these three provinces could potentially make this research more representative of the whole western region.

2) These three provinces represent the extreme cases among western provinces in higher education performance after the policy’s implementation: Inner Mongolia and Yunnan are the best performers while Qinghai is the worst. This contrast is worth noticing and would be a good starting point for conducting a further analysis of the linkage between performance and policy.

3.4 Research method

3.4.1 Qualitative Content analysis of official document

The Eleventh Five Year Higher Education Plan of the three selected provinces will be used as the source for a content analysis in this thesis. The analysis aims to identify the policy standards and objectives of the plan, which are the indicators.

3.4.2 Quantitative analysis of official statistics

In this thesis, the author will analyze the data that are retrieved from several official books of statistics, which are the national statistical reports, *China Statistic Year Book* and *China Education Yearbook*, and the regional statistical reports, *Index of Economic*
The purpose of doing this data analysis is to try to see whether there is any pattern of change that can be found in the data over the years in terms of analyzing higher education performance, as well as other areas of performance that are associated with the CWDP policy in the selected region.

There are several advantages of using official statistics for this thesis:

1) Using the already-collected data saves considerable time and expense of collecting data (Bryman, 2008: 304). Due to the time and capacity limitation of this master’s thesis, self-collecting the needed vast number of data would be challenging.

2) It allows a longitude and cross-sectional research (Bryman, 2008: 304), which is very important when doing policy analysis. In order to see the change pattern in the chosen areas of study, data from the selected years will be needed. In this case, official statistics provide a big collection of data in terms of time and scale. Moreover, data from different sections can be retrieved from official statistics, which is important when the author intends to analyze the change in the social and economic factors in the selected provinces.

### 3.4.3 Secondary qualitative analysis of other academic work

“In the context of qualitative data, it is possible that a secondary analysis will allow the researcher to mine data that were not examined by the primary investigators or that new interpretations may be possible.” (Bryman, 2008: 561) As for this case study, the secondary analysis will allow the author to gather sufficient qualitative data from three big regions (three provinces) in terms of several perspectives in the process of the policy’s implementation. Furthermore, in this thesis, secondary analysis will be conducted on several authors’ studies, which also give a more objective point of view to the problem.

### 3.5 Reliability, replication, and validity of the data

According to Bryman (2008: 31), three types of criteria are most prominent in terms of social research evaluation. These are reliability, replication, and validity.
Reliability refers to the question of whether the results of the study are repeatable. Reliability is particularly important with regard to quantitative research because it indicates whether the measure successfully conveys the concept. In this thesis, reliability is high because of the following: when doing the quantitative data analysis, firstly, the author chose the measurement carefully to be consistent with the concepts that are to be studied; secondly, the concepts that the author uses in the thesis, such as governmental funds and gross enrollment ratio, are easy to be interpreted and hardly involve confusion.

Replication is very similar to reliability. Whether a study is capable of being replicated is highly valued within a quantitative research tradition (Bryman, 2008: 32). As mentioned in the last paragraph, this study’s quantitative data analysis has high reliability, hence, has the capacity to be replicated by other academics.

Validity is considered as the most important criterion of research in many ways (Bryman, 2008: 32). There are several different main types of validity that concern themselves either more with quantitative research or more with qualitative research.

Measurement validity primarily applies to quantitative research. It is concerned with whether a measure truly reflects the concept that is to be denoted (Bryman, 2008: 32). Whether a measure is reliable contributes to measurement validity. As mentioned in the reliability discussion, this thesis uses measurements that are consistent with the chosen concepts, which suggests a high reliability as well as high measurement validity.

Internal validity relates mainly to the issue of causality (Bryman, 2008:32). Commonly the factor that has a causal impact is referred to as the independent variable, and the effect is referred to as the dependent variable. In this thesis, the dependent variable is the higher education performance in three selected provinces, and the independent variables are the policies of CWHEDP. This research aims to explore the linkage between the independent and dependent variables by conducting data analysis, content analysis, and secondary analysis of other academic work. However, due to the limitation of the size and scale of this master’s thesis, a more detailed exploration into each province’s policy implementation cannot be conducted.
Hence, instead of making a strong statement of causality, the author will only make some assumptions of causality based on the research.

External validity is concerned with whether the results of a study can be generalized beyond the specific research context (Bryman, 2008: 33). For the quantitative part of this thesis, the data source is China Statistical Database\(^6\) which is run by the national statistical bureau of China. The data that are used in this study are from a large scale sampling over a long period, which adds the external validity to the research. In terms of the case study design, this case study covers three of the twelve provinces of the western region. When choosing the three provinces, the author considered the representation issue in both natural and social environment and the higher education performance that is shown in the data. This method of selection also contributes to the external validity of the study. However, the generalization is still limited due to the nature of case studies.

Chapter 4: Background of China’s Higher Education System and China’s Western Higher Education Development Plan (CWHEDP)

In this chapter, the author first discusses the characteristics of China’s higher education system, as well as the historical reasons for the shaping of this system. Then, the author discusses CWHEDP in terms of its background, goals, content, policy instruments, etc. The background knowledge in this chapter is important for the analysis in next chapter. And the analysis will link back to the background discussion.

4.1 China’s Higher Education System

4.1.1 The recovery of China’s modern education system (1978 - present)

After China's Reform and Opening Up policy which started in December 1978 by reformists within the Communist Party of China (CPC) led by Deng Xiaoping, China's whole society has been facing rapid economic growth. The core of the policy is to transform China from a planned economy system to a market economy system. The Reform and Opening Up policy affected China’s society in an unprecedented way. As a result, different fields of the society are facing a series of challenges. A set of new policies have been formulated in order to undertake these challenges.

In October 1977, the State Council authorized the document of the Ministry of Education titled The Suggestion on the Work of Enrollment to Higher Education in 1977, and the national university entrance examination was officially resumed. Since then, China's higher education system moved quickly on a road to recovery. Several national higher educational conferences were held in the year 1978. Many issues were discussed, and a set of regulations was released:
1) Enhancing postgraduate education. Postgraduate education was named as the key emphasis in higher educational development after 1983. A number of graduate schools were founded in different universities during this period.

2) Enhancing the quality construction of universities and the higher education system. It was mentioned in The Eighth Five Year Plan in June 1990 that the central government would invest in several universities for the purpose of improving quality and competitive power in the next 10 to 15 years. This was known as the Project 211 afterwards. Project 211 is a project of National Key Universities and colleges initiated in 1995 by the Ministry of Education of the People's Republic of China, with the intent of raising the research standards of high-level universities and cultivating strategies for socioeconomic development. During the first phase of the project, from 1996 to 2000, approximately US$2.2 billion was distributed (Li, 2004).

3) Reforming the higher education system. China's Education Reform and Development Outline, which was published in 1992 during The Fourteenth National Congress of the Communist Party of China, proposed a set of reforming ideas regarding aims and guidelines for higher education. In the meantime, the tuition fee system was well-established, which eased universities' financial trouble from the insufficient investment of the central government.

4) Merging universities. Since 1990, merging several universities into a big scale comprehensive university has been the trend for the purpose of competing with world class universities.

5) Expanding higher education enrollment to a large degree. The Ministry of Education implemented a plan called 21st Century Action Plan for Revitalizing Education in 1999. It says in the plan that China's gross enrollment rate of higher education should reach 15% by the year 2010. In order to realize this objective, Chinese universities have expanded their enrollment scale year by year from 1999, under the financial and political support of the government. In the meantime, Project 985 was introduced as a similar project to Project 211. It called for the central government to invest a large amount of funding in a number of universities. Project
985 was first announced by CPC General Secretary and Chinese President Jiang Zemin at the 100th anniversary of Peking University on May 4, 1998, to promote the development and reputation of the Chinese higher education system.

During this period, one of the most prominent transformations for China’s higher education system is that China started moving from elite higher education to mass higher education. In 1977, the number of university students was about 625,300, while in 2007, this number increased to be more than 27,000,000. The gross enrollment rate for higher education in 1977 was less than 1%. In 2007, this figure reached 23% (Gu, 2008). More cities started having their own universities. Higher education resources, as a result, did not only concentrate in a few big cities but started to spread all over the country.

4.1.2. Administration of China’s higher education system

China’s HEIs are divided into three different categories according to their different types of administration: Central governmental administrative HEIs, provincial administrative HEIs, and city administrative HEIs (Wang, 2011). Another factor that is worth noticing is that because of this type of higher education administrative mode, the policy control distance among these three categories is different. City administrative HEIs have the longest policy control distance while central governmental administrative HEIs have the shortest policy control distance. Policy control distance by its definition is the distance between policy maker and policy implementation object within one political system (Yang, 1999). Usually, the longer the policy control distance, the higher the possibility and the larger the extent of policy distortion (Wang, 2011). Thus, when it comes to a discussion of policy implementation distortion (as mentioned in Chapter 2.2 Features of policy implementation in China), the policy control distance in China’s higher education system plays one important role.
As for China’s sovereign, rationality-bounded state model type of higher education system itself, the traditional problem caused by it are as follows:

1) Lack of autonomy. Due to the fact that universities are steered by the government and the distinguishing political system of government, the leadership in universities is appointed by the government. The admission procedure and daily operation are regulated by the government, as is student-to-teacher ratio, enrollment number, enrollment method, the setting of programs, curriculum within the program, class hour, study materials, and so forth. Moreover, assessment activities that are organized by the Ministry of Education are another way the government steers universities. As a result, universities become more and more alike (Hou, 2011).

2) Limited sources of funding. In China, universities have two major ways to raise funds: governmental funding and tuition fees. The government has historically played a very important role in funding, since the overwhelming majority of higher education

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7 China is under the government of the current ruling party: the Communist Party of China, which is the central power for deciding the country’s economic, social, and political activities.
institutions are state-owned. Tuition fees are another source of funding for universities. Since the higher education expansion, which started in the beginning of the 21st century (mentioned in Chapter 4.1.1 The recovery of China’s modern education system), the financing mode for Chinese higher education institutions has been through reformation. The transformation from “Governmental investment as the major way” to “governmental investment and individual investment as two major ways” is the biggest change. Before 1998, governmental funding accounts for 60% of the total funding in a university. After 2002, this ratio decreased to 40% while tuition fees increased from 20% to 40% (Sun, 2009).

3) Lack of competition. In China, universities are divided into different levels as in a political system. From HEIs under the direct administration of the Ministry of Education to HEIs under the direct administration of provincial government to HEIs under the administration of city government, different levels of universities are strictly under the regulation of different levels of government. Universities receive resources from the government in accordance with their level. Thus, universities lack the pressure for competition.

In this paper, the author will mainly discuss the condition of higher education in the public domain. There are two reasons for this:

1) Within the context of China’s central government, which highly controls the higher education system, private HEIs are living in a disadvantaged position. As a matter of fact, it is a trend that the students whose academic records are not good enough to enter public HEIs will start considering private HEIs (Liu, 2006). The reasons for this situation is that public HEIs in the sovereign, rationality-bounded state type of higher education system in China, represent a high percentage of state will, while private HEIs have more free will, which is a disturbance for the higher education system itself. Thus, private HEIs' development has many limitations under the system (Liu, 2006). Other than that, funding is also a big issue for private HEIs. As it will be discussed in the latter chapter, the ways that Chinese HEIs raise funds is limited. As Clark (1998) states, there are mainly three ways for HEIs to raise funds: governmental grant, competitive funds won by research projects, and other income raised by HEIs themselves, such as from tuition, sales and services income, donation, and so on.
Chinese HEIs rely highly on governmental grants and then tuition fees; other ways of raising funds are very limited. As for private HEIs, the major source of income is tuition, while governmental input is far less than sufficient (Liu, 2006). This leads to the fact that private HEIs usually suffer from lack of funding.

2) This paper analyzes the impact from central and local governmental policies, which have the most influence on public HEIs rather than on private HEIs.

### 4.1.3 The funding structure of Chinese HEIs

As has already been discussed in Chapter 4.1.2 Administration of China’s higher education system, there are two main types of universities in China: central governmental administrative HEIs and local governmental administrative HEIs. The following tables give a comparison of the funding structure between central governmental administrative HEIs and local governmental administrative HEIs in China and public HEIs and private HEIs in U.S., during the years of 2000-2001 and 2005-2006.

#### Table 4.1.1 Funding sources of central governmental administrative HEIs in China (2000-2001)
(Source: China Statistic Year Book 2001)

<table>
<thead>
<tr>
<th>Source of funding</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>69.59</td>
</tr>
<tr>
<td>Tuition fee</td>
<td>16.98</td>
</tr>
<tr>
<td>Sales and services income</td>
<td>2.29</td>
</tr>
<tr>
<td>Donation</td>
<td>2.81</td>
</tr>
<tr>
<td>Other income</td>
<td>8.33</td>
</tr>
</tbody>
</table>

#### Table 4.1.2 Funding sources of local governmental administrative HEIs in China (2000-2001)
(Source: China Statistic Year Book 2001)

<table>
<thead>
<tr>
<th>Source of funding</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>55.41</td>
</tr>
<tr>
<td>Tuition fee</td>
<td>37.37</td>
</tr>
<tr>
<td>Sales and services income</td>
<td>1.23</td>
</tr>
</tbody>
</table>
Donation & 0.96  
Other income & 5.03  

<table>
<thead>
<tr>
<th>Source of funding</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>52.19</td>
</tr>
<tr>
<td>Tuition fee</td>
<td>37.47</td>
</tr>
<tr>
<td>Sales and services income</td>
<td>1.09</td>
</tr>
<tr>
<td>Donation</td>
<td>0.8</td>
</tr>
<tr>
<td>Other income</td>
<td>8.44</td>
</tr>
</tbody>
</table>

**Table 4.1.3 Funding sources of central governmental administrative HEIs in China (2005-2006)**

(Source: China Statistic Year Book 2006)

<table>
<thead>
<tr>
<th>Source of funding</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>46.87</td>
</tr>
<tr>
<td>Tuition fee</td>
<td>43.11</td>
</tr>
<tr>
<td>Sales and services income</td>
<td>1.07</td>
</tr>
<tr>
<td>Donation</td>
<td>0.49</td>
</tr>
<tr>
<td>Other income</td>
<td>8.45</td>
</tr>
</tbody>
</table>

**Table 4.1.4 Funding sources of local governmental administrative HEIs in China (2005-2006)**

(Source: China Statistic Year Book 2006)

We can observe from table 4.1.1, 4.1.2, 4.1.3, and 4.1.4 the following:

1) In China, the major ways for obtaining funding in HEIs are government grants and tuition fees, which together provide about 90% of the total funding, whether it is within the central governmental administrative category or the local governmental administrative category. At the same time, other funding sources such as sales and services income and donation are very small. As a matter of fact, Chinese HEIs’ financing has been under the binary fund-raising system, which is governmental grant and tuition fee, for a long time (Geng, 2010).

2) From the periods 2000-2001 to 2005-2006, this funding structure has not changed much, though government and society has been promoting various ways of raising funds for HEIs since 1993 (Geng, 2010).
3) The funding structure is very similar between central governmental administrative HEIs and local governmental administrative HEIs.

**Table 4.1.5 Funding source of public HEIs in US (2005-2006)**
(Source: Geng, 2010)

<table>
<thead>
<tr>
<th>Source of funding</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>50.78</td>
</tr>
<tr>
<td>Tuition fee</td>
<td>18.07</td>
</tr>
<tr>
<td>Sales and service income</td>
<td>21.65</td>
</tr>
<tr>
<td>Other income</td>
<td>9.5</td>
</tr>
</tbody>
</table>

**Table 4.1.6 Funding source of private HEIs in US (2005-2006)**
(Source: Geng, 2010)

<table>
<thead>
<tr>
<th>Source of funding</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>18.33</td>
</tr>
<tr>
<td>Tuition fee</td>
<td>38.11</td>
</tr>
<tr>
<td>Sales and service income</td>
<td>23.53</td>
</tr>
<tr>
<td>Other income</td>
<td>20.03</td>
</tr>
</tbody>
</table>

It can be observed from table 4.1.5 and 4.1.6 that, in the US, ways of fund-raising for HEIs are more diverse in the sense that the percentage of each source is more equally spread. Each different way of raising funds is not much different from the Chinese picture. Funding is mainly from the government, tuition, sales and services income, and some other form of income. In the US, governmental funding still accounts for half of the funding structure in public HEIs, while in private HEIs, tuition plays the most important role in that it accounts for more than 1/3 of the total funding. Other than these sources, in both the public and private categories, sales and service income and other income play a fairly important role. In the public domain, these two ways of raising income account for 30% of the total, and in the private domain, they account for more than 40% of the total funding.

In conclusion, compared to the US higher education system, Chinese sources of
fund-raising are less diverse and more dependent on government and tuition fees. Thus, governmental policy presumably makes a bigger difference towards the whole picture of higher education in China.

4.2 Background of China’s Western Higher Education Development Plan (CWHEDP)

CWHEDP was implemented as the higher education domain of China’s Western Development Plan (CWDP). The latter was implemented by the central government in 2000 as a means for narrowing the economic and social gap between the western region and other regions of China.

4.2.1 China’s Western Development Plan (CWDP)

Several elements about CWDP will be discussed as the general background of CWHEDP.

1) Reasons for implementing CWDP

After the Culture Revolution (ended in 1976), China suffered a serious fiscal deficit. Most people were living below poverty level and the country’s productivity was very much lagging behind most others.

As a result, China implemented The Reform and Opening-Up Policy in 1978 and began the transformation from command economy (or planned economy) to market economy. As part of the first stage of The Reform and Opening-Up Policy, the eastern coastal regions received most of the funding and benefited greatly from the reforms since these are the regions that have the geographical advantage to connect and trade with overseas more easily. At the same time, the western region lagged behind severely due to the lack of funding and lack of access to trade and business.

In addition to the policy, natural environment is also an important reason for the underdevelopment in the western region. First, the western region has historically suffered from drought and desertification as well as a lack of water resources. Second, from the topographic feature aspect, the western region is inland and mostly mountainous. Thus, it has suffered for a long time from traffic inconvenience, land
resources shortage, and poor access to information.

As time goes by, the imbalance between the eastern region and the western region not only reflects on economic growth, but also on education, cultural life, and environment.

While the eastern regions enjoyed their booming economy, the gap between eastern and western became even bigger through the years. It gradually became an obstacle for China’s economic development as a whole. Thus, China implemented the China Western Development Plan in 2000 as a means to narrow the gap between the eastern and western region.

2) Aim of CWDP
Using the remaining capacity for economic development from the eastern regions, the government has sought to raise the level of economic and social development in the western region.

3) Size and scale of CWDP
China was first divided into three regions (East, Middle and West) in 1986. The division was published in the Fourth Session of the Sixth National People's Congress, as a part of The Seventh Five Year Plan. During recent years, the division has been modified several times. At the present, the division is as follows: The eastern region includes Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan; the middle region includes Heilongjiang, Jilin, Shanxi, Anhui, Jiangxi, Henan, Hubei and Hunan; and the western region includes Sichuan, Chongqing, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia and Xinjiang, Guangxi and Inner Mongolia.

According to the National Development and Reform Commission, this division is not based on geographical features or administrative areas, but is only a political division. Thus, the eastern region refers to the provinces that first adopted coastal open policy and has a relatively high level of economic development; the middle region refers to the provinces that have a lower level of economic development; and the western region refers to the provinces that have the lowest level of economic development in
the country.

The plan covers six provinces (Shaanxi, Gansu, Qinghai, Sichuan, Guizhou and Yunnan), five ethnic minority autonomous regions (Ningxia, Xinjiang, Tibet, Inner Mongolia and Guangxi), and one municipality, Chongqing (the city which is governed directly by the central government).

The whole western region contains 71.5% of the area of China, while the population is 28.7% of the whole population as of 2005. (China Statistical Yearbook, 2005)

Figure 4.2.1: Regional distribution in China

(Source: Wikipedia8)

4) Main Strategy of CWDP

1. Strengthening the construction of infrastructure: building roads, railways, and airports, as well as optimizing telecommunication infrastructure and water

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supply.

2. Strengthening biological construction and environment protection: providing free crops to farmers, returning the grain plots to forestry, etc.

3. Adjusting industrial structure strengthening the agricultural foundation, increasing farmers' income, promoting industrial development, enhancing tourism development.

4. Strengthening the development of science and education: ensuring the priority of education development.

4.2.2 China’s Western Higher Education Development Plan (CWHEDP)

1) Background of the higher education condition in the western region.

The overall higher education condition in the western region is lagging behind the other regions of the country. The development of higher education is limited in many ways. There are several factors contributing to this condition.

First, economic underdevelopment limits higher education development. It can be observed from Table 4.2.1 and Table 4.2.2 that, in 2000, the western region, with 28.6% of the country's population, holds only 20.2% of the country's GDP (China Statistical Yearbook, 2001). In China, there are three major industries. The first industry is agriculture. The second includes mining, manufacturing, production and supply of electricity, gas and water, and the construction industry. The third industry is the service industry, which includes transportation, telecommunication, retail, real estate, education, cultural activities, entertainment, social organization, and so forth. In 2000, the national proportion between the three major industries was 1:0.5:0.7, while the western region’s proportion between the three major industries was 1:0.3:0.5 (China Statistical Yearbook, 2001). It is apparent that the western region relies heavily on agriculture, but the input into the second and the third industries is not good enough. As a result, this kind of industry proportion is not conducive to economic development, as well as to providing job opportunities for university graduates. What is more, the city scale in the western region also hinders higher education development. With 28.7% of the country’s population, the western region has only 25.3% of the country’s city number. Small cities (population is under
200,000) accounts for 74.36% of the country’s total number. Medium cities (population is from 500,000 to 1 million) accounts for 17.2% of the country’s total number. Big cities (population is more than 1 million) accounts for only 21.01% of the country’s total number (China Statistical Yearbook, 2001) (Chen, 2006). It is a known fact that higher education institutions are inclined to locate in medium or big cities. And university graduates are inclined to go to medium or big cities to seek job opportunities.

Table 4.2.1: Comparison of the number of GDP between the whole nation and the western region (2004)
(Source: China Statistical Yearbook, 2005)

<table>
<thead>
<tr>
<th>Category</th>
<th>Whole nation</th>
<th>Western region</th>
<th>Percentage (western region/whole nation %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical size (10,000 square kilometres)</td>
<td>960.0</td>
<td>686.7</td>
<td>71.5</td>
</tr>
<tr>
<td>Population (10,000)</td>
<td>129988.0</td>
<td>37127.0</td>
<td>28.6</td>
</tr>
<tr>
<td>GDP (0.1 billion yuan)</td>
<td>136875.9</td>
<td>27585.2</td>
<td>20.2</td>
</tr>
</tbody>
</table>

Table 4.2.2: the comparison of the structure of industry between the whole nation and the western region (2004)
(Source: China Statistical Yearbook, 2005)

<table>
<thead>
<tr>
<th>Region</th>
<th>Component part (total=100)</th>
<th>Proportion ratio of the three industries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First industry</td>
<td>Second industry</td>
</tr>
<tr>
<td>Whole nation</td>
<td>46.9</td>
<td>22.5</td>
</tr>
<tr>
<td>Western region</td>
<td>56</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Table 4.2.3: Comparison of city scale between the whole nation and the western region (2002)
(Source: China Statistical Yearbook, 2003)

<table>
<thead>
<tr>
<th>Region</th>
<th>City scale divided by population (Unit: 1 city)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

46
Second, the low educational level in the population influences higher education development. From the educational level respect, which can be seen from table 4.2.4, the western region has a higher proportion than the whole nation in illiteracy and has a lower proportion than the whole nation in the population who receives education in each level, from primary school to higher education (Chen, 2006).

**Table 4.2.4: Comparison of educational level between the whole nation and the western region (2000)**
(Source: China Statistical Yearbook, 2001)

<table>
<thead>
<tr>
<th>Region</th>
<th>Item</th>
<th>Population above 6 years old</th>
<th>Illiterate</th>
<th>Primary school</th>
<th>Middle school</th>
<th>High school</th>
<th>Higher education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Nation</td>
<td>Number of people</td>
<td>1177817</td>
<td>107922</td>
<td>381371</td>
<td>462796</td>
<td>157783</td>
<td>67945</td>
</tr>
<tr>
<td></td>
<td>Proportion (%)</td>
<td>100</td>
<td>9.16</td>
<td>32.38</td>
<td>39.29</td>
<td>13.40</td>
<td>5.77</td>
</tr>
<tr>
<td>Western Region</td>
<td>Number of people</td>
<td>336434</td>
<td>38109</td>
<td>128194</td>
<td>115351</td>
<td>37880</td>
<td>16900</td>
</tr>
<tr>
<td></td>
<td>Proportion (%)</td>
<td>100</td>
<td>11.33</td>
<td>38.10</td>
<td>34.29</td>
<td>11.26</td>
<td>5.02</td>
</tr>
</tbody>
</table>

From the perspective of illiteracy, which can be seen from Table 4.2.5 above, 15 years olds’ illiteracy in the western region is remarkably higher than the national figure by 12 percentage points. And more than 60 percent of illiterate Chinese live in the western region.

**Table 4.2.5: Comparison of the number of illiterate population between the whole nation and the western region (2000)**
Third, inadequate investment in education limits higher education development. In China, higher education institutions rely heavily on government funding (as mentioned in Chapter 4.1.3 The funding structure of Chinese HEIs). It is a common problem that universities are lacking sufficient funds. Because of economic underdevelopment, the educational funding shortage is even more severe in the western region. It can be seen from Table 4.2.6 that compared to the whole nation, the education expenditure per student in the western region is much lower (Chen, 2006). In addition, the government is cutting public funding every year (as mentioned in Chapter 4.1.3 The funding structure of Chinese HEIs). It can be seen from the figure that the funding reduction in the western region is more than in the whole nation.

Table 4.2.6: The comparison of education expenditure per student in higher education institutions between the whole nation and the western region (2000)
(Source: China Education Yearbook 2001)

<table>
<thead>
<tr>
<th>Region</th>
<th>2002 (CNY)</th>
<th>2003 (CNY)</th>
<th>Growth rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole nation</td>
<td>6177.96</td>
<td>5772.58</td>
<td>-6.56</td>
</tr>
<tr>
<td>Western region</td>
<td>5105.87</td>
<td>4520.13</td>
<td>-11.47</td>
</tr>
</tbody>
</table>

Fourth, weak basic education influences higher education development. From the enrollment rate aspect, it can be seen from Table 4.2.7 that the enrollment rates in the western region in different educational levels are all lower than the figure of the
whole nation (Chen, 2006).

Table 4.2.7: The comparison of enrollment rate between the whole nation and the western region (2000)
(Source: China Education Yearbook 2001)

<table>
<thead>
<tr>
<th>Region</th>
<th>Enrollment rate from primary school to middle school (%)</th>
<th>Enrollment rate from middle school to high school (%)</th>
<th>Enrollment rate from high school to higher education (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole nation</td>
<td>98.10</td>
<td>62.91</td>
<td>81.79</td>
</tr>
<tr>
<td>Western region</td>
<td>96.34</td>
<td>57.47</td>
<td>68.33</td>
</tr>
</tbody>
</table>

From the aspect of school student number, it can be seen from Table 4.2.8 that per every 100,000 people, the school population in the western region is lower than in the whole nation at each level from primary school to high school.

Table 4.2.8: The comparison of school student number (per 100,000 persons) between the whole nation and the western region (2000)
(Source: China Education Yearbook 2001)

<table>
<thead>
<tr>
<th>Divided by educational degree</th>
<th>High school</th>
<th>Middle school</th>
<th>Primary school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole nation</td>
<td>2824</td>
<td>5058</td>
<td>8725</td>
</tr>
<tr>
<td>Western region</td>
<td>2354</td>
<td>4859</td>
<td>10299</td>
</tr>
<tr>
<td>Gap between the western region and the whole nation</td>
<td>-470</td>
<td>-199</td>
<td>1574</td>
</tr>
</tbody>
</table>

Fifth, low quality of teaching staff limits higher education development. It can be seen from Table 4.2.9 that in the western region, the educational level and academic level of higher education institution teaching staff are lower than in the whole nation (Chen, 2006).

Table 4.2.9: The comparison of higher education institution teaching staff's educational degree and academic title between the whole nation and the western region (2000)
(Source: China Education Yearbook 2001)

<table>
<thead>
<tr>
<th>Divided by educational degree</th>
<th>Divided by academic title</th>
</tr>
</thead>
</table>
2) Policy goals of CWHEDP

A number of goals were written in CWHEDP as guidelines for the first ten years’ actions (2001 to 2010)\(^9\):

1. Increasing educational investment. The central finance will and the provincial public finance should increase their educational investment considerably in the western region from 2002 to 2005. It is encouraged to use financial instruments and credit facilities to help with educational development, to continue to try to obtain loans from international financial institutions, and to actively carry out educational saving and educational insurance. Basic education should be enhanced, and the popularization of nine-year compulsory education should be accelerated.

2. Enhancing higher vocational education. Every province, autonomous region, and centrally administered municipality should take into consideration the local social and economic development and the key construction project's need and establish a number of vocational education institutions. And these institutions should be within a certain scale, be fully functioning, have well-structured and high-level teaching staff, and have advanced facilities and teaching methods. Gradually, there will be a vocational education system established, which includes three levels from junior to senior. The communication between vocational education and normal higher education should be enhanced. Vocational school students can be admitted to normal higher education institutions according to certain conditions, as well as admitted to higher level vocational education.

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3. Enhancing normal higher education. Structure adjustment in study programs in higher education institutions should be accelerated. Courses and program that are practical and in need in the society should be established. The central government will execute tilt policy towards the western region's higher education institutions on teaching material construction, degree approval, and the development of key disciplines and key laboratories. Higher education enrollment scale in the western region should be expanded. High quality universities in the middle and eastern regions will expand their enrollment scale in the western region, especially on master and doctor degrees. Joint operation between higher education institutions in the western, eastern and middle regions is encouraged. Financial discount limit of national student loans for the western region's universities will be increased.

4. Enhancing the continuing education for professionals. Both the general increase in the basic quality of professionals and training for high-level personnel, leaders of groups, and the demanding professionals should be emphasized. Introduce the advanced training content, methods, techniques, and concepts from foreign countries in order to realize the modernization of continuing education.

5. Encouraging societal forces, overseas organizations, and individuals to donate or help with the school running, according to the People's Republic of China Public Welfare Donation Law, Social Force's School Running Ordinance, and relevant regulations of Chinese-foreign cooperation in running schools. The investors, who help with establishing higher education institutions in the western regions, will be guaranteed free rent for using state-owned land.

6. Enhancing the development of remote education. Accelerate the implementation of Extension Project of Western Region Educational Research Network. Make sure that the provincial network for Chinese education and science research will be established in three years from 2002. Western Region's Higher Education Institution's Campus Network Program shall be implemented, and the western region's ability to share national educational resources shall be enhanced.

These general policy goals serve as instructions for the provincial Five Year Higher Education Plan which will be discussed in next chapter.
Chapter 5: Analysis of China’s Western Higher Education Development Plan - Case Study of Provincial Five Year Higher Education Plan

In this chapter, the author examines the changes not only in the western region’s higher education but also in the region’s overall social and economic condition during the first ten years of the implementation of CWDP (2001-2010), focusing on the three selected provinces: Yunnan, Sichuan, and Qinghai. First, the statistical data comparison between western region, eastern region, and middle region is presented. Then, the author takes a closer look into the western region itself by looking into each province and drawing some comparisons. The main comparison is between Yunnan, Sichuan, and Qinghai. In addition, the statistical data of every province in the western region is presented to help the readers to gain a general view of the western region’s development during those ten years.

After discussing the change pattern, the author looks into the implementation process of three provinces’ The Eleventh Five Year Higher Education Plan (from 2006 to 2010) in order to explore factors that potentially influence policy’s implementation. The analysis is based on the six variables: policy standards and objectives, policy resources, inter-organizational communication and enforcement activities, the characteristics of the implementing agencies, the economic, social, and political environment, and the disposition of the implementers.

5.1 National (regional) picture - the comparison between the three regions: east, middle and west

Several factors contribute to the weak condition of the western region’s higher education. These reasons have already been discussed in Chapter 4.2.2 China’s Western Higher Education Development Plan. In order to conduct a further analysis of the change pattern of higher education in the western region, the author now looks
into the data that several important contributors have mentioned before. After the data are presented, an analysis and some speculations will be made.

### 5.1.1 Economic conditions

First, the western region’s poor economic condition had hindered higher education development (see the discussion in Chapter 4.2.2 China’s Western Higher Education Development Plan), but this economic condition changed after the plan was implemented. It can be observed in Table 5.1.1 that the increasing rate of GDP per capita in the western region is the lowest among the three regions from 1992 to 2000, which was nine years before the implementation of CWDP. As for the eastern region, the GDP per capita was the highest among the three regions, and the gap is relatively big: in 1992, the GDP per capita in the eastern region was twice as high as the GDP per capita in the western region. Moreover, the gap became even bigger from 1992 to 2000. In 2000, the GDP per capita in the eastern region was 11678 CNY, which is about 2.53 times of the figure in the western region (4601 CNY). Such a pattern can also be observed in the increasing rate figure. From 1992 to 2000, the increasing rate of GDP per capita in the eastern region was 266 percent, whilst the figure in the western region was 174 percent. According to the data in Table 5.1.1, the author concludes that before 2000 (i.e., before the implementation of CWDP), the western region had the lowest starting point of GDP per capita compared to the other two regions, and the gap continued to grow even larger through the years.

#### Table 5.1.1: The comparison of GDP per capita in the three regions (Unit: 1 CNY)


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>3188</td>
<td>7104</td>
<td>11678</td>
<td>266</td>
</tr>
<tr>
<td>Middle</td>
<td>1701</td>
<td>3693</td>
<td>5894</td>
<td>247</td>
</tr>
<tr>
<td>West</td>
<td>1678</td>
<td>3348</td>
<td>4601</td>
<td>174</td>
</tr>
</tbody>
</table>

Since the establishment of CWDP in 2000, a set of actions have been conducted in the western region according to the policy. Table 5.1.2 shows a comparison between the
three regions in terms of change of GDP per capita from 2000 to 2010. The picture here looks very different from the one that Table 5.1.1 draws. During these ten years, the western region’s GDP per capita increased by 291 percent, which was the highest increasing rate among the three regions. The eastern region still holds the highest GDP per capita each year, but the gap between the eastern region and the western region grows smaller. For example, in 2010, the GDP per capita in the eastern region was about twice as much as the figure in the western region. Compared to the difference in 2001 (2.53 times more), the gap was getting much smaller.

Table 5.1.2: The comparison of GDP per capita in the three regions (Unit: 1 CNY)
(Source: China Statistic Year Book 2000, 2006, and 2010)

<table>
<thead>
<tr>
<th>Region</th>
<th>2000</th>
<th>2006</th>
<th>2010</th>
<th>Increasing rate 2000-2010 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>11678</td>
<td>27063</td>
<td>45510</td>
<td>290</td>
</tr>
<tr>
<td>Middle</td>
<td>5894</td>
<td>12911</td>
<td>24871</td>
<td>322</td>
</tr>
<tr>
<td>West</td>
<td>4601</td>
<td>11158</td>
<td>22569</td>
<td>391</td>
</tr>
</tbody>
</table>

Hence, the author makes the initial conclusion that the economy in the western region has been getting better at a faster speed than it had been before the implementation of CWDP, so the economic gap between the western region and the others is getting smaller. However, the link between the western region’s economic development and the policy cannot be identified yet.

5.1.2 Basic education and the higher education population

Basic education and higher education conditions in terms of the educational population are the next important elements of higher education development in the western region (see the discussion in Chapter 4.2.2 China’s Western Higher Education Development Plan).

Table 5.1.3 first shows the percentage of the illiterate population among all people aged 15 and older in the three regions in the years 2000, 2006, and 2010. In all three years, the western region has the highest percentage of illiterate people. The second
part of the table displays the decreasing portion of the illiterate population through the ten-year period in the three regions. From 2000 to 2010, decreasing rate of the illiterate population in the western region was more than 50 percent, which is a prominent change, but still the lowest decreasing speed among the three. Nevertheless, one thing worth noticing is that during the first five-year period, the decreasing rate in the western region is much slower than the rate of the eastern region, which has the highest decreasing rate at that time. However, during the second five-year period, the decreasing rate in the western region became much higher than it was in the last period and was actually the highest rate among the three regions. This fast decreasing pattern in the second five-year period can also be observed in the other two regions, which also have a much higher decreasing rate than they did during the first five-year period.

Table 5.1.3: Percentage of illiterate population to total aged 15 and older (%)
(Source: China Statistic Year Book 2000, 2006, and 2010)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>10.5</td>
<td>7.5</td>
<td>4.3</td>
<td>28.6</td>
<td>42.7</td>
<td>59</td>
</tr>
<tr>
<td>Middle</td>
<td>9.8</td>
<td>8.6</td>
<td>4.9</td>
<td>12.2</td>
<td>43</td>
<td>50</td>
</tr>
<tr>
<td>West</td>
<td>15.2</td>
<td>12.8</td>
<td>7.1</td>
<td>15.8</td>
<td>44.5</td>
<td>53.2</td>
</tr>
</tbody>
</table>

Table 5.1.4 shows the education level distribution in each of the three regions in 2000, 2006, and 2010. It covers the population aged 6 years and older. In all three years, the western region has had the highest percentage of people with either no schooling or only primary schooling. Regarding secondary school and higher education, a lower percentage of the western population has attended compared to the other two regions.

Table 5.1.4: Percentage of educated population to total aged 6 and older (%)
(Source: China Statistic Year Book 2000, 2006, and 2010)
The change pattern during these ten years (see Tables 5.1.4a, 5.1.4b, and 5.1.4c in the appendices) reveals several more attributes.

First, when comparing the increasing rate in the period from 2006 to 2010, one will find that western higher education had not only the highest figure but also double the figures of the other two regions. In terms of its population obtaining higher education, the western region was improving the fastest compared to the other regions.

Second, the western region was doing relatively well on the other educational levels in terms of increasing attendance.

Third, when comparing the increasing rate in the period from 2000 to 2006 and the rate of the period from 2006 to 2010 in the western region, one will notice that the figure in the latter period is much more visible than it is in the former period, which means more changes occurred during the latter period.

Thus far, a change pattern can be observed. If we divide the ten-year period (2000-2010) into two halves, then the changes in the statistical data are much more obvious in second half than they are in the first half. To conduct a better analysis of the relationship between changes and policy, the author will concentrate on the second half, because the changes in the second half are bigger, and the period from 2006 to 2010 coordinates with the implementation period of The Eleventh Five Year Plan, upon which the author is conducting the case study.
5.1.3 Funding

Thirdly, investment from the government and funds from other sources are essential to educational development, as has been mentioned in Chapter 4.2.2 China’s Western Higher Education Development Plan.

Table 5.1.5 shows a comparison of educational funds per province for all educational levels among the three regions. The data come from two years: 2006 and 2010. It can be observed from this table that all three regions’ total educational funds underwent a leap in the sense that all the figures in 2010 are much higher than they were in 2006. The western region, which has the highest increasing rate throughout the five years, experienced a prominent increase in its funding of 140.7 percent.

**Table 5.1.5: The comparison of total educational funds per province**  
(Source: China Statistic Year Book 2006 and 2010)

<table>
<thead>
<tr>
<th>Region/Year</th>
<th>Total educational funds per province (10,000 CNY)</th>
<th>Increasing rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange rate (CNY/ USD)</td>
<td>2006</td>
<td>2010</td>
</tr>
<tr>
<td>East</td>
<td>7.8087</td>
<td>6.6227</td>
</tr>
<tr>
<td>Middle</td>
<td>379864</td>
<td>696962</td>
</tr>
<tr>
<td>West</td>
<td>336961</td>
<td>686965</td>
</tr>
<tr>
<td>West</td>
<td>131976</td>
<td>317616</td>
</tr>
</tbody>
</table>

The governmental investments into education of all levels among the three regions appear in Table 5.1.6. As it has already been discussed in Chapter 4.1.3 The funding structure of Chinese HEIs, governmental investment is one of the most important funding sources of China’s public HEIs, which takes more than half of the total fund. Comparing Tables 5.1.5 and 5.1.6 reveals that governmental funding plays an even more important role in the domain of all levels of education, which takes about 78 percent of the total fund on average. Thus, similar increasing patterns can also be observed in Table 5.1.6. The western region still has the highest increasing rate in the domain of governmental educational funds per province from 2006 to 2010.

**Table 5.1.6: The comparison of governmental educational funds per province**  
(Source: China Statistic Year Book 2006 and 2010)
Governmental financial fund per province for education (10,000 CNY)  
Increasing rate (%)  
<table>
<thead>
<tr>
<th>Region/Year</th>
<th>2006</th>
<th>2010</th>
<th>2006-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange rate (CNY/ USD)</td>
<td>7.8087</td>
<td>6.6227</td>
<td></td>
</tr>
<tr>
<td>East</td>
<td>242371.0909</td>
<td>515575.6364</td>
<td>112.7</td>
</tr>
<tr>
<td>Middle</td>
<td>210760.875</td>
<td>505420.625</td>
<td>139.8</td>
</tr>
<tr>
<td>West</td>
<td>95462.41667</td>
<td>257278.75</td>
<td>169.5</td>
</tr>
</tbody>
</table>

However, the picture looks different when it incorporates only the data from higher education.

Table 5.1.7 compares the total funding for higher education among the three regions in 2006 and 2010. All three regions’ educational fund increased from 2006 to 2010. The fastest growing funding is in middle region, followed by the funding in the western region. The difference between the regions’ increasing rates is relatively small with about 20 percent difference between the highest and the lowest funded regions. However, in Table 5.1.8, the comparison of governmental funding in the same domain shows that from 2006 to 2010, the western region experienced the lowest growth rate of only 80.4 percent, whilst the middle region and eastern region had a growth rate of 155.2 percent and 146.1 percent, respectively. The increasing rate in other two regions is much higher than the rate in the western region with a maximum of 75 percent difference. Because China’s higher education relies heavily on governmental investment, the author suspects that the provincial government in the western region has generally placed less emphasis on higher education’s funding than the other two regions have while implementing The Eleventh Five Year Plan. Further examinations of this assumption will be made in the following chapter when the author examines the three provinces’ implementation of The Eleventh Five Year Plan.

Table 5.1.7: The comparison of total higher educational funds per province  
(Source: China Statistic Year Book 2006 and 2010)

<table>
<thead>
<tr>
<th>Region/Year</th>
<th>Total funds for higher education per province (1,000 CNY)</th>
<th>Increasing rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2010</td>
<td>2006-2010</td>
</tr>
<tr>
<td>Exchange rate (CNY/USD)</td>
<td>7.8087</td>
<td>6.6227</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>East</td>
<td>14258764</td>
<td>27596620</td>
</tr>
<tr>
<td>Middle</td>
<td>7935404</td>
<td>16783271</td>
</tr>
<tr>
<td>West</td>
<td>3887828</td>
<td>7842892</td>
</tr>
</tbody>
</table>

Table 5.1.8: The comparison of governmental higher educational funds per province
(Source: China Statistic Year Book 2006 and 2010)

<table>
<thead>
<tr>
<th>Region/Year</th>
<th>Governmental financial fund per province for higher education (1000 CNY)</th>
<th>Increasing rate (2006-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange rate (CNY/USD)</td>
<td>7.8087</td>
<td>6.6227</td>
</tr>
<tr>
<td>East</td>
<td>6282771</td>
<td>15462822</td>
</tr>
<tr>
<td>Middle</td>
<td>3032459</td>
<td>7739662</td>
</tr>
<tr>
<td>West</td>
<td>1654009</td>
<td>2984365</td>
</tr>
</tbody>
</table>

5.1.4 Quality of teaching

Fourth, the quality of teaching is an important measure of educational quality. The student-teacher ratio is an important indicator of this quality. This ratio for the different school levels in the years 2004 and 2010 is shown in Table 5.1.9. The higher the decreasing rate, the more the region is resolving its lack of teaching staff. It can be seen from the data that the western region has the highest negative decreasing rate in higher education, which means that one teacher needed to teach an increasing number of students as those five years progressed. This lack might be an indication of the western region’s lower quality of teaching.

Table 5.1.9: The comparison of student-teacher ratio by different school levels (Number of teachers = 1)
(Source: China Statistic Year Book 2004 and 2010)
In short, this comparison of the national data reveals the following information: during the first ten years of CWDP’s implementation, especially from 2006 to 2010, the western region was developing the fastest among the three regions in higher education in terms of economic condition, basic education condition, and funds for all educational levels. In terms of the population receiving higher education, the western region also had the fastest growing rate among the three regions. However, the western region was developing the slowest among the three regions in other areas that are directly linked to higher education, such as funds for higher education and teaching quality.

The author’s conclusions thus far are that the western region was doing very well in some areas that potentially have an impact on higher education development after the implementation of CWDP. It was also doing very well in terms of increasing its higher education population after the policy, which shows a well-developing picture of western higher education in general. However, in some other sectors that also directly link to higher education development, the western region was not doing better than the other regions were, such as funds for higher education and teaching quality. This suggests that the higher education plan of CWDP (which is referred to as CWHEDP in this thesis) may not contribute much in terms of funding. So far, it is still difficult to make assumptions about whether or how CWHEDP affects the western region. In order to analyze further CWHEDP, the author now takes the analysis to local level.

5.2 Local (provincial) picture

Moving from the regional comparison, the author now looks closely into the higher
education development of each province in the western region to see if there is any interesting figure or pattern among the different categories of data of certain provinces. Later, this investigation will lead to an even more specific look into those provinces’ policy implementation.

Table 5.2.1: The comparison of absolute student numbers of higher education enrollment (Unit: 10,000 persons)
(Source: China Statistic Year Book 2006 and 2010)

<table>
<thead>
<tr>
<th>Province</th>
<th>2006</th>
<th>2010</th>
<th>Increasing Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chongqing</td>
<td>12.23</td>
<td>16.41</td>
<td>0.3417</td>
</tr>
<tr>
<td>Gansu</td>
<td>8.69</td>
<td>11.41</td>
<td>0.3130</td>
</tr>
<tr>
<td>Guangxi</td>
<td>13.23</td>
<td>18.26</td>
<td>0.3801</td>
</tr>
<tr>
<td>Guizhou</td>
<td>7.17</td>
<td>9.93</td>
<td>0.3849</td>
</tr>
<tr>
<td>Inner Mongolia</td>
<td>7.98</td>
<td>11.25</td>
<td>0.4097</td>
</tr>
<tr>
<td>Ningxia</td>
<td>1.95</td>
<td>2.5</td>
<td>0.2820</td>
</tr>
<tr>
<td>Qinghai</td>
<td>1.19</td>
<td>1.3</td>
<td>0.0924</td>
</tr>
<tr>
<td>Shaanxi</td>
<td>21.16</td>
<td>26.71</td>
<td>0.2622</td>
</tr>
<tr>
<td>Sichuan</td>
<td>26.28</td>
<td>33.21</td>
<td>0.2636</td>
</tr>
<tr>
<td>Tibet</td>
<td>0.84</td>
<td>0.92</td>
<td>0.0952</td>
</tr>
<tr>
<td>Xinjiang</td>
<td>5.91</td>
<td>7.36</td>
<td>0.2453</td>
</tr>
<tr>
<td>Yunnan</td>
<td>9.36</td>
<td>14.1</td>
<td>0.5064</td>
</tr>
</tbody>
</table>

Table 5.2.1 shows the change in enrollment numbers in higher education during the period from 2006 to 2010 in each province in the western region. Yunnan and Inner Mongolia have the highest increasing rate, while Qinghai and Tibet have the lowest increasing rate.

Table 5.2.2: The comparison of student numbers in higher education institutions (Unit: 10,000 persons)
(Source: China Statistic Year Book 2006 and 2010)

<table>
<thead>
<tr>
<th>Province</th>
<th>2006</th>
<th>2010</th>
<th>Increasing Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chongqing</td>
<td>37.61</td>
<td>52.27</td>
<td>0.3897</td>
</tr>
<tr>
<td>Gansu</td>
<td>26.37</td>
<td>38.15</td>
<td>0.4467</td>
</tr>
<tr>
<td>Guangxi</td>
<td>38.74</td>
<td>56.75</td>
<td>0.4648</td>
</tr>
</tbody>
</table>
Table 5.2.2 shows the change in student number in HEIs over the five-year period. The figures among the provinces are relatively close. However, Yunnan and Inner Mongolia still have the highest increasing rate. At the same time, Qinghai still has the lowest increasing rate, which is almost 30 percent lower than the highest figure.

Table 5.2.3: Condition of fixed assets and teaching resources (owned by HEIs)
(Source: China Statistic Year Book 2006 and 2010)

<table>
<thead>
<tr>
<th>Province/Year</th>
<th>Area of school sites (1,000 m²)</th>
<th>Fixed assets (10,000 CNY)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
<td>2010</td>
</tr>
<tr>
<td>Exchange rate (CNY/USD)</td>
<td></td>
<td>7.8087</td>
</tr>
<tr>
<td>Chongqing</td>
<td>8735</td>
<td>42653</td>
</tr>
<tr>
<td>Gansu</td>
<td>6702</td>
<td>22263</td>
</tr>
<tr>
<td>Guangxi</td>
<td>8122</td>
<td>37610</td>
</tr>
<tr>
<td>Guizhou</td>
<td>5202</td>
<td>23602</td>
</tr>
<tr>
<td>Inner Mongolia</td>
<td>5880</td>
<td>32154</td>
</tr>
<tr>
<td>Ningxia</td>
<td>1667</td>
<td>10137</td>
</tr>
<tr>
<td>Qinghai</td>
<td>704</td>
<td>3997</td>
</tr>
<tr>
<td>Shaanxi</td>
<td>20065</td>
<td>53523</td>
</tr>
</tbody>
</table>
Table 5.2.3 shows the changes in the fixed assets and teaching resources of HEIs. In terms of fixed assets, Yunnan and Inner Mongolia once again have the highest increasing rate, whilst Qinghai again has the lowest increasing rate. So far, there are three provinces worth noticing in terms of student number in higher education, fixed assets, and teaching resources of HEIs: Yunnan and Inner Mongolia perform relatively well among all the western provinces, while Qinghai performs relatively poor. In order to do a more detailed analysis of the western higher education condition at the provincial level, it is better to narrow the analysis from all provinces in the western region to a few representative provinces. The data provide a pattern that makes three provinces Yunnan, Inner Mongolia, and Qinghai stand out. They perform either the best or the worst in the western region in several categories of data related to higher education. This strong contrast is interesting enough for a further investigation. By conducting a case study of these three provinces, the author attempts to explore a little of the linkage between performance and CWHEDP. Therefore, the next step of this data analysis is to concentrate on Yunnan, Inner Mongolia, and Qinghai. The data of all provinces in the western region will still be presented to do a comparison between these three provinces and the other, unselected provinces.

In terms of the change pattern of funding for higher education (Table 5.2.4), Inner Mongolia, which performed relatively well in the former analysis, has the highest increasing rate in funding for higher education from 2006 to 2010. Moreover, Inner Mongolia’s figure is about 50 percent higher than the second highest increasing rate in the western region. Yunnan, which performed equally as well as Inner Mongolia in the former analysis, has an average increasing rate in this analysis. Qinghai, which performed poorly in the former analysis, has one of the lowest increasing rates.

<table>
<thead>
<tr>
<th>Province</th>
<th>2006 Fund</th>
<th>2010 Fund</th>
<th>Increasing Rate</th>
<th>Source 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sichuan</td>
<td>22111 76985</td>
<td>2.48 26445425</td>
<td>0.86</td>
<td>China Statistic Year Book 2006 and 2010</td>
</tr>
<tr>
<td>Tibet</td>
<td>769 2916</td>
<td>2.79 770312</td>
<td>2.51</td>
<td></td>
</tr>
<tr>
<td>Xinjiang</td>
<td>4484 29233</td>
<td>5.51 5036276</td>
<td>1.06</td>
<td></td>
</tr>
<tr>
<td>Yunnan</td>
<td>7309 35126</td>
<td>3.8 7568054</td>
<td>2.26</td>
<td></td>
</tr>
<tr>
<td>Province/year</td>
<td>2006</td>
<td>2010</td>
<td>Increasing rate</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Exchange rate (CNY/USD)</td>
<td>7.8087</td>
<td>6.6227</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chongqing</td>
<td>5461875</td>
<td>13694092</td>
<td>1.5072</td>
<td></td>
</tr>
<tr>
<td>Gansu</td>
<td>3111479</td>
<td>3987560</td>
<td>0.2815</td>
<td></td>
</tr>
<tr>
<td>Guangxi</td>
<td>3619800</td>
<td>8928279</td>
<td>1.4665</td>
<td></td>
</tr>
<tr>
<td>Guizhou</td>
<td>2333717</td>
<td>5841492</td>
<td>1.5030</td>
<td></td>
</tr>
<tr>
<td>Inner Mongolia</td>
<td>2692077</td>
<td>8221931</td>
<td>2.0541</td>
<td></td>
</tr>
<tr>
<td>Ningxia</td>
<td>821544</td>
<td>1232180</td>
<td>0.4998</td>
<td></td>
</tr>
<tr>
<td>Qinghai</td>
<td>527473</td>
<td>740031</td>
<td>0.4029</td>
<td></td>
</tr>
<tr>
<td>Shaanxi</td>
<td>10511942</td>
<td>11289206</td>
<td>0.0739</td>
<td></td>
</tr>
<tr>
<td>Sichuan</td>
<td>11353101</td>
<td>26687186</td>
<td>1.3506</td>
<td></td>
</tr>
<tr>
<td>Tibet</td>
<td>472527</td>
<td>695747</td>
<td>0.4723</td>
<td></td>
</tr>
<tr>
<td>Xinjiang</td>
<td>2069439</td>
<td>4633819</td>
<td>1.2391</td>
<td></td>
</tr>
<tr>
<td>Yunnan</td>
<td>3678972</td>
<td>8163189</td>
<td>1.2188</td>
<td></td>
</tr>
</tbody>
</table>

The consistency of change patterns of a few higher education performances and higher education funds in these three provinces suggests a possible link between CWHEDP and performance, because increasing governmental funding is one important tool of the policy.

However, the performance is not always consistent with the funding pattern in some cases. In terms of changes to GER in higher education in the three provinces, Inner Mongolia was the only province that did not reach the goal of GER in the “Eleventh Five Year Higher Education Plan” in 2010. The goal in this plan is 25 percent by 2010, and the figure in Inner Mongolia reached only 23.1 percent by 2010. Qinghai and Yunnan both reached the GER goal in their plans. The figure of Yunnan is 2.02 percent higher than the goal, and the figure of Qinghai is 1.17 percent higher. As for the increasing rate, Inner Mongolia had one of the lowest increasing rates during the five years, which was 0.1907. Meanwhile, Yunnan had one of the highest increasing rates (0.43), and Qinghai had an increasing rate that was just above the national average.
Table 5.2.5: The comparison of GER in higher education
(Source: Han, 2007; Shang, 2013)

<table>
<thead>
<tr>
<th>Province/Years</th>
<th>2006</th>
<th>2010</th>
<th>Increasing rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>National average</td>
<td>22</td>
<td>26.5</td>
<td>0.2045</td>
</tr>
<tr>
<td>Chongqing</td>
<td>21</td>
<td>30</td>
<td>0.4285</td>
</tr>
<tr>
<td>Gansu</td>
<td>15</td>
<td>22</td>
<td>0.4666</td>
</tr>
<tr>
<td>Guangxi</td>
<td>15</td>
<td>19</td>
<td>0.2666</td>
</tr>
<tr>
<td>Guizhou</td>
<td>10</td>
<td>20</td>
<td>1.0000</td>
</tr>
<tr>
<td>Inner Mongolia</td>
<td>19.4</td>
<td>23.1</td>
<td>0.1907</td>
</tr>
<tr>
<td>Ningxia</td>
<td>19.2</td>
<td>25.1</td>
<td>0.3072</td>
</tr>
<tr>
<td>Qinghai</td>
<td>21</td>
<td>26.17</td>
<td>0.2461</td>
</tr>
<tr>
<td>Shaanxi</td>
<td>22</td>
<td>31</td>
<td>0.4090</td>
</tr>
<tr>
<td>Sichuan</td>
<td>21.02</td>
<td>25</td>
<td>0.1893</td>
</tr>
<tr>
<td>Tibet</td>
<td>16.3</td>
<td>23.4</td>
<td>0.4355</td>
</tr>
<tr>
<td>Xinjiang</td>
<td>18.1</td>
<td>24.99</td>
<td>0.3806</td>
</tr>
<tr>
<td>Yunnan</td>
<td>14</td>
<td>20.02</td>
<td>0.4300</td>
</tr>
</tbody>
</table>

A few conclusions can be drawn from the data analysis of the provincial level.

First, among all the provinces in western region, Inner Mongolia, Yunnan, and Qinghai stood out due to their exceptional performances in terms of a few indicators of provincial higher education condition. Inner Mongolia and Yunnan performed very well among all the western provinces, while Qinghai’s performance is usually one of the poorest in the region.

Second, higher education funding in these three provinces during the five years shows a pattern that is consistent with their higher education performance that was identified by the previous analysis. Inner Mongolia performed well and had the highest increasing rate in funds, whereas Qinghai performed poorly and had the lowest increasing rate in funds. Yunnan underwent an average increasing rate in funding even though its performance was as good as the performance of Inner Mongolia. This suggests a possible link between CWHEDP and provincial higher education...
performance, because increasing governmental funds is one important policy tool of CWHEDP.

Third, although Inner Mongolia performed very well in a few indicators of higher education performance, but it does not always perform the best. In terms of GER of higher education during the five years, Inner Mongolia not only did not reach the GER goal in its “The Eleventh Five Year Higher Education Plan” but also had one of the lowest increasing rates of GER. Qinghai, on the other hand, reached its GER goal in “The Eleventh Five Year Higher Education Plan,” and also had a GER increasing rate that was among the average. Yunnan reached its GER goal as well, and had the highest increasing rate in GER. Therefore, performance is not always consistent with the funding pattern, thus challenging the possible linkage between CWHEDP and provincial higher education performance that was suggested by the last point.

On the basis of these analyses, it is necessary to do a further investigation into the three selected provinces in order to analyze whether the linkage between the policy and performance exists, and if so, how they are linked.

In next part of the thesis, the author will look into the “Provincial Five Year Higher Education Plan” in each of these three provinces, which is the inheritance of China’s western Higher Education Development Plan (CWHEDP) at the provincial level. The analysis of the policy will be based on the analytic framework and theory that were introduced in Chapter 2, the model of six variables and the linkage between the variables.

5.3 The analysis of provincial The Eleventh Five Year Higher Education Plan (2006-2010)

The six variables model of the policy implementation process that was introduced by Van Meter and Van Horn (1975) will be used as the analytical framework here. In order to understand better the implementation process of CWHEDP (Provincial Five Year Higher Education Plan) in each province, the author will first be looking at each variable that is provided by the model.
Kaufman (1973: 2) provided a theory of three general explanations for a failed policy implementation. These three explanations can be traced back to Van Meter and Van Horn’s six variables. Thus, after discussing the six variables in this case study, the author will perform an analysis that is based on the six variables to test whether Kaufman’s theory applies in this case.

5.3.1 Model of six variables

1) Policy standards and objectives

The content of each province’s Five Year Higher Education plan was retrieved from official documents. The policy standards and objectives that are described in each plan are as follows:

Inner Mongolia

- The gross enrollment ratio of higher education should reach around 25%, and the number of students in higher education should reach 500,000.
- A more reasonable overall arrangement for higher education should be reached. Two to three more HEIs should be added during the five-year period, and more HEIs should be encouraged to set up graduate schools.
- The quality of the teaching staff should improve. By the year 2010, the teaching staff with master’s or doctorate degrees should reach the proportion of 40 percent. Training should be enforced on a group of teaching staff with the goal of fostering ten of them to be the leaders in their academic fields.
- Enforce the development of key HEIs, key academic disciplines, and key laboratories. In addition to continuing to develop the University of Inner Mongolia, one to two more research-based HEIs should be set up. Reach eight national key academic disciplines and 60 provincial academic disciplines. Set up one to two new national key laboratories or engineering research centers and ten new provincial key laboratories. The HEIs that can authorize doctorate degrees will reach the number of five to six, and the number of doctoral programs will reach the number of 70. The HEIs that can authorize master’s degrees will reach ten, and the number of master’s programs will reach more than 400.
- Optimize the academic discipline structure and enhance the teaching quality.
Adapt the direction of the academic discipline structure to the needs of provincial development. Enhance the monitoring of teaching quality in HEIs. Set up and improve the monitoring system for the teaching quality of HEIs.

- Enhance the ability of innovation and service in HEIs. Promote HEIs’ self-innovation, technology transformation, and industrialization. Solve a number of major tasks and technique problems during The Eleventh Five Year Plan’s implementation.
- Enhance educational informatization. Finish building a campus network in every HEI. Modern teaching methods should be utilized in more than 80 percent of classes.
- The schools’ facilities should be clearly improved. At the end of the five-year period, all HEIs should reach the qualified level of “The basic standard of school facility in HEIs” that is published by the Ministry of Education.

Yunnan
By the year 2010,

- The gross enrollment ratio of higher education should reach around 18%, and the number of students in higher education should reach 66,600;
- The government should fund most of the policy implementation, and societal forces should cover the rest;
- The quality of the university should be improved in the sense of developing key universities and key disciplinary fields;
- The reformation of the higher education administrative system should be enforced;
- Higher education among ethnic minority groups should be enhanced, and the educational differences between ethnic groups should be equalized;
- The quality of the teaching staff should be improved;
- International educational communication should be enhanced by exchanging university students with other countries; and
- An adequate student financial assistance system should be established.

Qinghai
By the year 2010,
• The gross enrollment ratio of higher education should reach around 25%; the annual increasing rate of the number of students enrolled in higher education should be around 3%; the enrollment number per year should reach 16,000; and the number of students in higher education should reach 60,000;
• The government should fund most of the policy implementation, and societal forces should cover the rest;
• Key universities and key disciplinary fields should be developed so that these schools can be part of the nation’s key construction projects;
• The infrastructure and facilities of HEIs should be improved;
• Higher education among ethnic minority groups should be enhanced;
• The quality of the teaching staff should be improved; and
• An adequate student financial assistance system should be established.

Several aspects of the policy standards and objectives in each plan are worth noticing. First, Yunnan and Qinghai’s plans are very similar in terms of their goals and the descriptions of those goals. With the exception of the GER of higher education, Yunnan and Qinghai describe their goals mostly with general descriptions, such as “improving infrastructure and facilities of HEI” and “improving the quality of the teaching staff.” They delineate specific goals only for the enrollment number of higher education and the number of students in HEIs.

Second, Inner Mongolia’s plan is quite different from the other two plans because of the greater variety in its goals and the specific descriptions of its goals. In addition to giving a specific number on the GER of higher education and the number of students in HEIs, which the other two provinces gave, this plan describes specific targets for almost every other goal. For example, in terms of quality of teaching staff, the goal in the other two plans is simply “improving the quality of teaching staff,” while Inner Mongolia’s plan states, “By the year 2010, the teaching staff with master’s or doctorate degrees should reach the proportion of 40 percent.” In terms of developing key universities and key academic disciplines, the other two plans say, “improving quality of university in the sense of developing key universities and key disciplinary fields,” while Inner Mongolia’s plan recommends enforcing the development on key HEIs, key academic disciplines, and key laboratories. And it says specific goals in the plan such as continue developing the University of Inner Mongolia, set up one to two
more research-based HEIs, reach eight national key academic disciplines and 60 provincial academic disciplines, and set up one to two new national key laboratories or engineering research centers and ten new provincial key laboratories. Moreover, there are the specific requirements such as the HEIs that can authorize doctorate degrees should reach the number of five to six, and doctorate programs should reach 70; the HEIs that can authorize master’s degrees should reach the number of ten and more than 400 master’s programs should be established. In this case, the goals in Inner Mongolia’s plan are more specific and easy to follow, while the goals in Yunnan and Qinghai’s plans are more ambiguous, so the implementers may have a hard time taking actions according to the goals.

2) Policy resources

Increasing funds is one important policy tool of CWHEDP, but there are other incentives, such as encouraging investments in higher education by reducing taxes; encouraging teaching resources to move to western HEIs by rewarding them for transferring; and reducing tuition fees for a number of students. However, this thesis focuses on funds, because funds are easier to compare than the other incentives are, and funds often serve as one important part of the policy resources.

Below are two tables of data from the author’s comparison of funds for all educational levels and for higher education. In terms of total funding, Qinghai has the highest increasing rate among all western provinces, and Inner Mongolia has the second highest increasing rate. Yunnan, on the other hand, has one of the lowest increasing rates. In terms of funding for higher education, Inner Mongolia has the highest increasing rate, with a figure that is 50 percent higher than the second highest increasing rate. As for Qinghai, its increasing rate is among one of the lowest. In Yunnan, the increasing rate is among the average figures.

The pattern that can be observed in these two tables is that Inner Mongolia’s funding conditions on all educational levels is getting better, especially in higher education. Qinghai’s funds in all educational levels are getting better at a rapid rate, although its higher education funding is increasing at a poor rate. As for Yunnan, its funding increasing rate for all educational levels is one of the lowest among all the western
provinces, whereas its funding increasing rate for higher education is at about the average level.

**Table 5.3.1: The comparison of total educational funds**

<table>
<thead>
<tr>
<th>Province/Year</th>
<th>Total educational fund (10,000 CNY)</th>
<th>Increasing rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
<td>2010</td>
</tr>
<tr>
<td>Exchange rate (CNY/ USD)</td>
<td>7.8087</td>
<td>6.6227</td>
</tr>
<tr>
<td>Inner Mongolia</td>
<td>1,480,999</td>
<td>4,143,731</td>
</tr>
<tr>
<td>Qinghai</td>
<td>373,988</td>
<td>1,062,206</td>
</tr>
<tr>
<td>Yunnan</td>
<td>2,311,083</td>
<td>5,336,317</td>
</tr>
</tbody>
</table>

**Table 5.3.2: Total funds for higher education**

<table>
<thead>
<tr>
<th>Province/Year</th>
<th>Total Educational Fund (10,000 CNY)</th>
<th>Increasing rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
<td>2010</td>
</tr>
<tr>
<td>Exchange rate (CNY/ USD)</td>
<td>7.8087</td>
<td>6.6227</td>
</tr>
<tr>
<td>Inner Mongolia</td>
<td>2,692,077</td>
<td>8,221,931</td>
</tr>
<tr>
<td>Qinghai</td>
<td>527,473</td>
<td>740,031</td>
</tr>
<tr>
<td>Yunnan</td>
<td>3,678,972</td>
<td>8,163,189</td>
</tr>
</tbody>
</table>

As it has been discussed in Chapter 4.1.3 The funding structure of Chinese HEIs, higher education relies heavily on two major resources in China: governmental investment and tuition fees. If we know that governmental investment always gives an university about half of the funding that it needs, then we can conclude from the funding pattern that the governments of Inner Mongolia and Qinghai put high emphasis on education compared to other provinces in the western region, while the government of Yunnan put comparably little emphasis on education. In addition, we can conclude that the governments of Yunnan and Inner Mongolia put heavy emphasis on higher education compared to the other levels of education, whereas the
government of Qinghai does not seem to value higher education as importantly as it does the other educational levels.

Although, these conclusions still do not have sufficient evidence. The author will look more deeply into the funding patterns of each of the three provinces to obtain a further understanding.

Inner Mongolia

Table 5.3.3 shows us that during the five-year period, the ratio of the Inner Mongolian government’s investment in higher education compared to Inner Mongolia’s GDP is almost always below 0.5%. Specifically, this ratio began at 0.54% in 2005 and has been decreasing ever since. By 2009, the ratio was about 0.48%. At the same time, the ratio of national governmental investment in higher education compared to the national GDP was always above 1% during those five years (Gao, 2011). It is obvious that the development of Inner Mongolia’s higher education is very much lagging behind from the national level and that the Inner Mongolian government is putting even less emphasis on higher education year after year.

Table 5.3.3: The comparison of governmental higher education investment and GDP
(Source: China Statistic Year Book 2006-2010, China Statistic Year Book of Educational Funding 2006-2010, Inner Mongolia Statistic Year Book 2006-2010)

<table>
<thead>
<tr>
<th>Year</th>
<th>Whole nation</th>
<th>Inner Mongolia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Funds for higher education (1,000 CNY)</td>
<td>GDP (0.1 billion CNY)</td>
</tr>
<tr>
<td>2005</td>
<td>73596625</td>
<td>183217</td>
</tr>
<tr>
<td>2006</td>
<td>242210052</td>
<td>211923</td>
</tr>
<tr>
<td>2007</td>
<td>269605071</td>
<td>265810</td>
</tr>
<tr>
<td>2008</td>
<td>361826204</td>
<td>314045</td>
</tr>
<tr>
<td>2009</td>
<td>423894698</td>
<td>340507</td>
</tr>
</tbody>
</table>
The data in Table 5.3.4 indicate that the ratio of governmental funds for higher compared to all educational levels has been always about 31% since 2005; as for Inner Mongolia, the ratio of governmental funding for higher education versus all educational level reached 18.43% by 2009, while the national ratio was 30.3%, which is almost 12% higher.

Table 5.3.4: The comparison of governmental funds for higher education and for all educational level (Unit: 1,000 CNY)
(Source: China Statistic Year Book 2005-2009)

<table>
<thead>
<tr>
<th>Year</th>
<th>Whole nation</th>
<th>Inner Mongolia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Funds for higher education</td>
<td>Total educational funds</td>
</tr>
<tr>
<td>2005</td>
<td>73596</td>
<td>666863</td>
</tr>
<tr>
<td>2006</td>
<td>242210</td>
<td>767243</td>
</tr>
<tr>
<td>2007</td>
<td>269605</td>
<td>868864</td>
</tr>
<tr>
<td>2008</td>
<td>361826</td>
<td>1166839</td>
</tr>
<tr>
<td>2009</td>
<td>423894</td>
<td>1398566</td>
</tr>
</tbody>
</table>

As for the governmental funding mode, Inner Mongolia is using the method of giving a certain amount of funding per student, which means the government is calculating the funds that it needs for one student, and then is adding the considerations of different educational standards for different HEIs and related political elements in order to make the final decision regarding the amount of funding. This type of funding mode does not stimulate competition among HEIs nor does it increase the efficiency of fund utilization. What’s more, this funding mode not only slows the increasing speed of governmental funding but also causes HEIs to place the most emphasis on expanding the scale of the school instead of expanding educational quality and efficiency (Gao, 2012).

Yunnan

Before 2004, the governmental funding mode in Yunnan had been to give a certain amount of funds to each student. This type of funding mode is very popular among HEIs, but, at the same time, this mode has several shortcomings. Governmental funding that is associated only with enrollment number does not help the political
steering to enhance educational quality. Some HEIs opened low-quality programs in order to get more funding but ignored their own development demands. Finally, some HEIs expanded their schooling scale without reasonable planning just for the sake of getting more funding. All of these decisions led to the waste of funding resources (Zhang and Lei, 2011).

In order to change this situation, the finance department of Yunnan province implemented a reform on the funding mode for HEIs that began in 2004. The reform required the next four years of governmental funding for HEIs to be based on the budget base of every institution in 2003. Then, this calculation could not be changed for the next four years. In conjunction with the budget base, the government added some special funds to certain areas according to the yearly budget in order to enhance the HEIs’ academic discipline construction and research ability and to build key laboratories. This special fund was concentrated on solving the problem of schooling facilities and some other key problems. At the same time, this special fund will be increasing each year (Zhang, Lei, 2011).

However, this funding still does not comprise enough investment in higher education. Table 5.3.5 shows the higher education investment condition from 2006 to 2007. In 2006, 1.89 GDP per person enabled one student to complete one year of higher education; in 2007, only 1.87 GDP per person was needed for one year. At the same time, the national average requires 1.4 GDP per person to support one student’s year of study. As for the international level, the number is 0.44 GDP per person (Zhang and Lei, 2011).

Table 5.3.5: The index of higher educational fund compared to GDP per capita in Yunnan from 2006 to 2007 (Unit: 1 CNY)
(Source: Index of economic and social development of Yunnan from 2006 to 2007)

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP per capita</th>
<th>Higher education fund per student</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a)</td>
<td>(b)</td>
<td>(c)=(b)/(a)</td>
</tr>
<tr>
<td>2006</td>
<td>8970</td>
<td>16973.36</td>
<td>1.89</td>
</tr>
</tbody>
</table>
Qinghai
Lack of funding is the most prominent problem of the HEIs in Qinghai. Qinghai’s governmental funding mode is to give a certain amount of funding per student. Governmental investment only ensures the function of a few key HEIs and key academic disciplines. At the same time, local HEIs do not have enough funding for normal functioning. Other than that, Qinghai’s HEIs have the problem of institutions overlapping and thus having over-sized staff, which makes the limited educational funding even harder to apply to the needed areas. Educational resources are wasted because of the overlapping construction of academic disciplines and a lack of reasonable educational planning (Mou, 2006). As the western development plan goes on, both the central and local governments are providing more and more funding support to HEIs. However, Qinghai has a relatively low economic condition compared to other western provinces. Therefore, the average educational fund and educational facilities are very much below the national average level (Wang, 2009).

To conclude, despite the fact that all three provinces are receiving more and more funds from the government every year, the funding is still not sufficient compared to the national average level, presenting a potential limitation to provincial higher education development.

As for governmental investment mode, Inner Mongolia and Qinghai are both using the method of giving a certain amount of funding per student. This type of funding mode does not sharpen the HEIs’ competition for funds, and it is not an efficient use of funds. Moreover, in order to get more funds from the government, some HEIs deliberately open some low-quality programs in order to get more funds while ignoring their own development demands; some HEIs expand their schooling scale without reasonable planning just for the sake of getting more funds. All of these lead to the waste of funding resources (Zhang and Lei, 2011). In contrast, Yunnan ceased to use this funding mode by commencing a reform in 2004 that bases funds on each HEI’s yearly budget as well as adds special funds to certain areas in order to enhance the HEIs’ academic discipline construction, research ability, and key laboratories. The
new funding mode will potentially encourage funds to be used more efficiently. However, the effect has yet to be seen.

3) Interorganizational communication and enforcement activities

Inner Mongolia

According to Li, the head of the education department of Inner Mongolia (Zhang, 2010), the provincial government is utilizing all sorts of ways to enhance the supervision job and to promote policy implementation on its higher education. Every year, the education department holds one conference for the whole province to deliver the governmental policy, review last year’s work, analyze the present condition, propose the next policy and movement, and arrange next year’s work. Other than that, there are other provincial educational conferences with different themes, which publish policies, such as “The suggestion on enhancing the reform in teaching method in HEIs” and “The suggestion on enhancing modern distance higher education in Inner Mongolia.” These conferences and policies have established clear and concrete requirements for the enhancement of educational reform, educational quality, and so on. These requirements also provide a clear guide for the supervision work of higher education.

Supervision departments hire very few long-term employees. Thus, the supervision job usually lacks initiative, continuity, and feedback, and it is difficult to find a supervision report that covers a complete system (Gao, 2012).

The performance of elementary schools and middle schools is more heavily supervised than that of higher education. Moreover, the limited supervision in higher education is concentrated only in the areas of teaching content, teaching quality, study conditions of the students, and teaching facilities. Thus, the areas of usage of funds and evaluation for research work are not receiving enough attention from the supervision department (Gao, 2012). As far as the supervision for teaching quality goes, it chiefly audits lectures, which allow supervisors from the government, school leaders, and teachers to listen to each other as well as to listen to students’ evaluations to gain a full perspective of the teaching quality of the teachers. However, auditing a few lectures is hardly revealing, because a good evaluation should be also based on a
long-term supervision of the class, the condition of teacher’s preparation for the lectures, the character of the course itself, and so on. Other than that, evaluating the students’ knowledge only once with a final examination at the end of each semester does not give a good indication of their education (Cheng, 2013).

Yunnan
At present, Yunnan has five local educational laws and 110 related normative documents that are published by the provincial educational department. Therefore, Yunnan has already set up its own modern education law system. However, this system has some flaws. Many local educational policies are not tightly connected to the local education development reality. There are too many similarities between local educational policies and national educational policies or administrative policies. Thus, the policy itself cannot be fully functional within its local context, nor can it solve the urgent problems (Zhang, 2012).

The policy itself has several common problems. First, there are many different forms for the title of policies, such as "method", "suggestion", "decision", "temporary method", "rules", and so on. These different types of titles make it difficult for implementers to distinguish the level of importance. Second, the structure of the local policies imitates many of the central governmental policies or simply inherits traits from other local existing policies, which causes policy overlapping. Furthermore, the imitated policies lack logic, so many policies have instructions only on patterns of behavior without the rules of legal consequence, which brings trouble for the implementation departments. Third, the content of the policies is usually repetitive and tedious, even the conflict itself, and the language the policies use is very often too abstract (Zhang, 2012). These types of local policies deter the implementation departments from following the rules well enough.

Qinghai
Qinghai’s Five Year Higher Education Plan suggested several ways to supervise the implementation of the plan: establishing a supervision system for higher education, establishing a target-oriented responsibility system, and strengthening the educational legal system. These three main points lack specific descriptions. In contrast, the other two provinces’ Five Year Plans both have more specific explanations of the
supervising methods. As for the implementation process, other authors’ articles often mention little more than the following: “enhancing the higher education supervision is one of the most important jobs of the Qinghai Education Department” (Liu, 2010). Therefore, the assumption that Qinghai’s Five Year Plan does not have enough emphasis on supervision sessions can be made. What’s more, academics not paying enough attention to the supervision sessions can be one of the reasons that the author found few research papers about higher education supervision.

In conclusion, enforcement activities have been better planned in Inner Mongolia and Yunnan’s Five Year Higher Education Plan than they have been in Qinghai. As for implementation, each province has its own problematic areas. However, compared to Qinghai, Inner Mongolia and Yunnan are putting more visible efforts into improving interorganizational communication and enforcement activities, which can be observed in official documents and academic papers. Qinghai, on the other hand, has very few official documents and academic papers on these issues.

4) Disposition of implementers

The implementers’ interest can already be observed in the discussion of policy resources about funding patterns. The author discovered that the governments of Yunnan and Inner Mongolia put heavy emphasis on higher education compared to what they put into other levels of education, while the government of Qinghai put far less emphasis on higher education compared to what it put in other educational levels.

Next, the author will look at each province separately.

Inner Mongolia
The funds that the Inner Mongolian government invests in the education domain can be observed from the statistics in “Yearbook of China Education Expenditure.” This document reports that the governmental investment ratio in higher education, secondary education, and elementary education was always around 1:2.37:1.67, respectively, from 2005 to 2009 (Gao, 2012). The investment ratio suggests that the government is putting more financial emphasis on secondary education and
elementary education than it is on higher education, which, according to Gao (2012), is not a reasonable investment distribution.

Yunnan

By comparing Table 5.3.1, “The comparison of total educational funds,” with Table 5.3.2 “Total funds for higher education,” we will see that from 2006 to 2010, Yunnan’s increasing rates for total educational funds and higher educational funds are 1.30 and 1.21, which is a tiny difference. Because the major funding for China’s HEIs comes from the government, the author assumes that Yunnan’s government is putting an equal amount of emphasis on higher education as it is on other levels of education.

Qinghai

Again, by looking at Table 5.3.1 and Table 5.3.2, one can see that from 2006 to 2010, Qinghai’s increasing rate of total educational fund and higher educational fund is 1.84 and 0.40. Therefore, Qinghai appears to place far less emphasis in higher education.

To conclude, the difference in the increasing rate can be a potential indicator of a local government’s way of distributing funds into different levels of education. The governments in Inner Mongolia and Yunnan put much more emphasis on higher education than Qinghai does. However, when we look at Inner Mongolia separately, we see that it still invests less in higher education than it does in secondary education and elementary education, which, according to Gao (2012), is not a reasonable investment distribution. This means that higher education is not emphasized enough in all three provinces. Moreover, Qinghai put the least amount of emphasis in higher education compared to the other two.

5) Economic, social, and political conditions

The main discussion here will be about economic conditions. China is politically centralized, which means different provinces share similar social and political characteristics, namely, a complex and centralized political system with a vast number of official bureaus that have the power to make political decisions. The parties have few conflicting interests, and the public opinion has limited impact on policy implementation. Therefore, the social and political environment is not unique in each
province and therefore would not account for differences in implementation across provinces.

In order to discuss the economic environment in the three provinces over the five years, the author refers to GDP per capita as an important indicator.

**Table 5.3.6: GDP per capita from 2006 to 2010 (Unit: 1 CNY)**
(Source: China Statistic Year Book 2006-2010)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange rate (CNY/USD)</td>
<td>7.8087</td>
<td>7.3041</td>
<td>6.8446</td>
<td>6.8265</td>
<td>6.6227</td>
<td></td>
</tr>
<tr>
<td>Inner Mongolia</td>
<td>20,523</td>
<td>26,521</td>
<td>34,869</td>
<td>39,735</td>
<td>47,347</td>
<td>1.307</td>
</tr>
<tr>
<td>Yunnan</td>
<td>8,929</td>
<td>10,609</td>
<td>12,570</td>
<td>13,539</td>
<td>15,752</td>
<td>0.764</td>
</tr>
<tr>
<td>Qinghai</td>
<td>11,889</td>
<td>14,507</td>
<td>18,421</td>
<td>19,454</td>
<td>24,115</td>
<td>1.028</td>
</tr>
<tr>
<td>National average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.866</td>
</tr>
</tbody>
</table>

Inner Mongolia

From 2006 to 2010, the increasing rate of Inner Mongolia’s GDP per capita is 1.307, which is 0.46 higher than the national average. Other authors have found that the increasing rate in Inner Mongolia has been very dramatic from 2001 to 2009. Inner Mongolia’s GDP in 2001 was 154.579 billion CNY, and became 974.025 in 2009. Therefore, the GDP figure sextupled over those nine years (Gao, 2011).

Social and economic development levels have a direct influence on higher education development in the sense that the GDP is the major instigator of governmental investment into higher education (Gao, 2011). Thus, it can be concluded that the fast economic growth in Inner Mongolia has provided a good developing condition for the province’s higher education.

In addition, Inner Mongolia has been facing the problem of the “brain drain” because of the mismatch of the industrial structure and the employment structure. Inner
Mongolia’s employment status does not match its economic growth in the sense that its increasing rate of unemployment exceeds its increasing rate of employment despite the fast economic growth in recent years. This weak economic condition causes a big number of high-level talents to move to other, more developed regions, jeopardizing the local scientific and economic development (Han and Su, 2011).

Yunnan
From Table 5.3.6, it can be observed that Yunnan’s GDP per capita’s increasing rate was 0.764 from 2006 to 2010, which is 0.1 lower than national average, and Yunnan already started with the lowest GDP per capita among the three provinces in 2006 with a figure of 8929 CNY per person. Thus, Yunnan’ economy is growing at a relatively slow pace in the national context as well as in comparison with Inner Mongolia and Qinghai.

What’s more, Yunnan’s education development speed has been slower than the speed of its economic development during the ten years from 1999 to 2008. During these ten years, the average increasing rate of Yunnan’s GDP is 12.98% while the average increasing rate of Yunnan’s educational composite index is 2.26%. As for the higher education domain, the proportion takes about 9.73% in the average increasing rate of Yunnan’s educational composite index, so this lack of higher education is, in turn, limiting the economic development of Yunnan (Shang, 2010).

Geographically, Yunnan is very close to southeastern Asian countries, providing Yunnan with good opportunities for economic, social, political, and educational exchanges. The central government has published a new plan called “Constructing Yunnan as the most important port for the communication with southeastern Asian countries” in May 2010 (Yin and Duan, 2013), which might provide a chance for the local economy and educational domain to improve their growth.

Qinghai
From 2006 to 2010, the increasing rate of Qinghai’s GDP per person was 1.028, which is almost 0.2 points higher than the national average. Thus, Qinghai appears to have had strong economic development during these five years.
However, as a relatively remote province, Qinghai is also part of the Qinghai-Xizang Plateau, which makes it a more mountainous region. A large amount of nomadic tribes live in the region, so the development of neither economy nor education is easy to encourage in the Qinghai province. Qinghai’s bad climate and under-developed traffic system limits its ability to ship more and better student resources from other provinces. As for the students that its universities do enroll, their incoming educational level is very uneven. For example, in the course of “College English,” 10 percent of the incoming students knew nothing about English before the course statistics from 2003; Mou, 2006). Qinghai is also suffering from a “brain drain” because of its weak social and economic conditions (Li, 2011).

In conclusion, the three provinces are similar in terms of social and political environments. However, in terms of the economic environment, Inner Mongolia always has the highest GDP per capita among the three as well as the highest increasing rate among the three from 2006 to 2010. Its increasing rate is also about 0.44 points higher than the national average during the same period. Qinghai has the second highest GDP per capita among the three provinces during these five years, and its increasing rate is 0.2 higher than the national average. On the other hand, Yunnan not only has the lowest GDP per capita every year but also has the lowest increasing rate during the five years. Its increasing rate is also lower than the national average by 0.1 points. Thus, among the three provinces, Inner Mongolia has the best economic conditions, and Yunnan has the poorest. What’s more, each province also has unique economic problems, such as “brain drain.” Talents are choosing to move in an eastern direction to more developed areas of China instead of staying in the western region due to the relatively poorly developed condition of the western region. Part of the reason why the western region fares so poorly appears to be its environmental elements.

6) Characteristics of the implementing agencies

As it has already been discussed in Chapter 2.2 Feature of policy implementation in China and Chapter 4.1 China’s Higher Education System, China’s political system and higher education sector has the typical bureaucratic structure. Within this typical structure, China’s HEIs get most of their funding from the government. All of these
characteristics compel official bureaus to play the main role in decision making and policy implementing. In terms of several elements of characteristics of the implementing agencies that were mentioned in the analytic framework, three provinces share similarities in hierarchical control degree among implementing agencies. Legislators and executives provide political support to the agencies, communication is open and free inside and outside the agency, and the agencies and policymakers can be connected formally or informally. However, the three provinces’ implementing agencies can differ in terms of the size and the work capacity of an agency’s staff. The agency’s functioning condition as well as similar elements that were just mentioned can also differ. Thus, there is merely a general similarity of characteristics between the three provinces’ implementing agencies, and there are possibilities of differences in some aspects, as well. Therefore, thorough fieldwork into each province will be necessary in order to identify the possible differences between implementing agencies. Due to the limitations of time and capacity of this master’s thesis, the fieldwork cannot be conducted at this time. However, this study will be a starting point for further research on this topic.

### 5.3.2 Relationship between variables and performance

Van Meter and Van Horn (1975) have given their understandings about the six variables’ relationship in the model. Moreover, Kaufman’s (1973: 2) theory of the three general explanations for a failed policy implementation suggests that the competence of the six variables is influential to the performance.

Based on this model (see Figure 2.2), the author now looks into the possible relationship among the six variables in this case study. Based on the former analysis, the author draws a rough table to show the results of the analysis.

#### Table 5.3.7: The analysis of the variables and performance in three provinces

<table>
<thead>
<tr>
<th></th>
<th>Inner Mongolia</th>
<th>Yunnan</th>
<th>Qinghai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy standards and objectives</td>
<td>++</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Policy resources</td>
<td>++</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Inter-organizational communication and enforcement activities</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>
Characteristics of the implementing agencies | / | / | /
---|---|---|---
Economic, social and political environment | ++ | - | +
Disposition of implementers | ++ | + | -
Performance | + | + | -

The table shows a comparison between the three provinces in terms of the six variables of performance. Competence is rated in a relative manner with “++”, “+”, and “-”, where “++” means the best among the three, “+” means the second best, “-” means the poorest, and “/” means that no difference has been identified thus far among the three provinces in terms of the given variable.

According to the model, inter-organizational communication and enforcement activities are influenced by policy standards and objectives, policy resources, and the characteristics of the implementing agencies. In this case study of three provinces, the characteristics of the implementing agencies are similar. As for the other three variables, they also exhibit a very similar pattern. Inner Mongolia and Yunnan, which display more competence with policy standards and objectives and policy resources, also wield better competence over their interorganizational communication and enforcement activities. Qinghai, on the other hand, has the poorest competence with all three variables.

The case study also revealed that policy resources do not always influence the economic, social, and political environments in the manner that the model describes. Although Inner Mongolia shows consistent competence with policy resources and the economic, social, and political environment, Yunnan and Qinghai exhibit the opposite competence with these two variables. While analyzing the economic, social, and political environments in this case study, the author studied the economic environment the most, because the social and political environments of three provinces are similar. Therefore, the result implies the inconsistency between policy resources and the economic environments of Yunnan and Qinghai.

The model then claims that the disposition of the implementers is influenced by policy resources, inter-organizational communication, enforcement activities, characteristics of the implementing agencies, and economic, social, and political
environments. When the author ignored the impacts of the characteristics of the implementing agencies, the competence of policy resources, inter-organizational communication, and enforcement activities, she found that the disposition of the implementers is consistent among the three provinces. However, in Yunnan and Qinghai, the competence of the economic, social, and political environment is not consistent with the disposition of the implementers.

The model suggests that the characteristics of the implementing agencies, the economic, social, and political environment, and the disposition of implementers all influence performance. The case study results corroborate this suggestion in terms of the disposition of the implementers. However, in terms of economic, social, and political environments, the results of competence are the opposite of the results of performance in the Yunnan and Qinghai provinces. However, it can also be observed from the table that consistency exists between the performance and the other four variables (policy standards and objectives, policy resources, inter-organizational communication and enforcement activities, and disposition of implementers) within all three provinces.

With the results of this case study, the author draws a new relationship map on the basis of Van Meter and Van Horn’s (1975) model. First, the author identifies the following five variables as influential to the differences in performance: policy standards and objectives, policy resources, interorganizational communication and enforcement activities, economic environment, and disposition of implementers. Regarding the relationship between the variables, the policy standards and objectives and the policy resources influence interorganizational communication and enforcement activities; the policy resources and inter-organizational communication and enforcement activities influence the disposition of the implementers; and the disposition of the implementers has a direct influence on performance. In addition, other variables have an indirect influence on performance. As for the economic environment, it shows the same influence on performance as the other variables show in the case of Inner Mongolia. However, in the case of Yunnan and Qinghai, the economic environment does not have the same influence on performance as the other variables do. In fact, the economic environment might even have a potentially negative influence on performance in these two provinces.
Chapter 6: Conclusions

Just like the debate about the success or failure of public policy between two people in a bar that was written by Bovens et al. (2001), there are many aspects to take into account when judging whether or not a policy is successful. Some factors could be directly linked to the policy, some are factors over which the policy has little or no control. Hence, judging the success or failure of a policy often depends on the perspectives of observers (Bovens et al., 2001). Sometimes, too much attention is given to the things that go wrong, instead of giving credit to the day-to-day successes of public policy (Bovens et al., 2001:4). Sometimes the opposite is true. However, very often there is no clear line between success and failure. “Success and failure mean different things to different people at different times” (Bovens et al., 2001; Bovens and Hart, 1996). The two people in the bar clearly judge the public policy from very different angles, and hence have opposite opinions on whether said policy was successful.

In this study, the author does not intend to judge the success or failure of the policy of CWHEDP. Not only because of the large geographical scale and the continuing modification of the policy, but also because of the nature of policy study as mentioned above: a policy’s success or failure is often very difficult to determine. Thus, what the author intended to do in this thesis was to study the changing pattern of China’s western region’s higher education condition, investigate some aspects of the implementation process of the policy of CWHEDP, investigate whether there is a linkage between the policy and student performance, and in the end, hopefully, say something about the policy’s impact on the region.

6.1 Characteristics of China’s policy implementation process

Based on Li’s (2004) study, “The Obstacle and Strategy towards China’s Public Policy's Implementation Process,” the author has established four common problems of policy implementation in China.
In terms of its political system, China is under the governance of a highly centralized system of government. Most policies are implemented through a political chain that comprises numerous levels of administrative agencies. Due to the size and diversity of the different regions of China, the central government is undergoing an ever-growing struggle to formulate a unified policy and to conduct unified management. What’s more, during the process of implementing a central policy, the division of policy authority and policy responsibility between the central government and local governments is sometimes neither clear nor reasonable. The local governments sometimes address this ambiguity by changing or deleting parts of the central policy in order to meet the needs of the local society, thus distorting the central policy.

One of the reasons why China’s central policy is sometimes abstract and vague is that some policymakers use a lot of obscure and difficult words and expressions in the policy content, which makes the policy even more difficult to understand. Some policymakers choose to write ambiguously in response to the flaws in the procedure and the regulations of the policymaking system itself. As a result, during the implementation process, many policies are misunderstood and thus implemented in a very different way from the original intention.

The policy implementers possess relatively extensive space in China’s policy implementation process to abuse their power in order to obtain their own benefits. They usually end up making their own version of policies by twisting and deleting the original policies. On one hand, they hinder the policy’s implementation, and, on the other hand, they undermine the public authority of the whole political system, which, in the end, harms the future implementation of any policy.

Finally, the regulations over the accountability and supervision system are usually sparse. Governmental officials are responsible for regulation during the process of policymaking and policy implementation, so it is important for them to obey the political rules and not abuse their power. To ensure that they do not take advantage of their positions, the government needs a good system of regulation for accountability and supervision. Such a regulation system is not yet well established in China, allowing officials to abuse their power.
6.2 Change of higher education conditions in the western region after implementing CWHEDP

Before the implementation of CWDP in 2000, Western China experienced relatively poor conditions compared to other regions of China in terms of many social sectors including economy, higher education, etc. During the period of 2000 to 2010, a number of changes can be identified in the society of the western region. Specifically regarding higher education, changes can be seen in several factors that were once identified as obstacles for higher education development in the western region.

6.2.1 National (regional) picture

A first important factor is the economic condition, which supports higher education with important social and economic resources. Comparing the periods of 1992 to 2000 and 2000 to 2010, the western region took a leap from having the lowest rate of increase in GDP per capita to the highest rate of increase among the three regions (east, middle and west).

A second factor is over-all education condition in western region including basic education and higher education. During the first ten years after CWDP's implementation, the western region saw a marked and continuous improvement in literacy levels and in levels of education among the population. Especially during the period of 2006 to 2010 (the period when "The Eleventh Five Year Plan" was implemented), the growth of the educational population was the fastest of the three regions. In terms of higher education, the increasing rate in population was not simply the highest, but almost doubled the figures of the other two regions.

A third factor is educational funds, which are essential for any change to take place in higher education. During the period of 2006 to 2010, the western region had the highest rate of increase in both total education funds and governmental education funds, which means, in terms of all different educational levels as a whole sector, the western region had the fastest-growing funds from the government and other sources, compared to the other two regions. However, despite the fact that the western education sector was receiving more and more funds, higher education did not have
the same level of growth in funds. During the period 2006 to 2010, the western region had the second fastest rate of increase in total higher education funds. In terms of governmental higher education funds, the western region had the lowest rate of increase, much lower than the other two regions (the middle region almost doubled the rate of increase of the western region).

A final factor is quality of teaching, which is essential for high quality development in higher education. During the period of 2004 to 2010, the statistical data show that in institutions of higher education, the number of students per teacher increased annually in the western region, and more dramatically than in the other two regions. This trend bears a potentially negative influence on teaching quality in higher education. Thus, compared to other regions, the western region's teaching quality in higher education was potentially becoming even worse after the implementation of CWHEDP. However, this is only one (indirect) indicator and that one would need more indicators to be able to make more definite assessments of the quality of higher education in the western region.

These changes can be summarized by noting that after the implementation of CWHEDP, the western region was performing very well in some areas that potentially impact higher education development, and was also doing very well in terms of increasing the higher education population. This shows a general picture of well-developing western-region higher education, which suggests the potential impact of CWHEDP. However, in some other sectors that also bear direct links to higher education development, the western region was not doing better than other regions, for instance, in the case of funds for higher education and in teaching quality. Returning to the discussion in Chapter 4.1.1 The recovery of China’s modern education system, and the data analysis of Chapter 5.1 National (regional) picture, it is apparent that China's higher education system has been developing at a relatively high speed in recent years, since the recovery of China's modern education in 1978 and the higher education expansion plan in 1999. Hence, in order to analyze the potential impact of CWHEDP on the basis of this general developing trend, comparison between the three regions is a very important indicator. Since the western region was not doing better compared to the other regions in terms of funds for higher education and teaching quality, the author assumes that CWHEDP might not contribute much to western-region higher
education in the sectors of funds and teaching quality, as well as, potentially, some others. However, the indicators and the data here are not giving sufficient ground for more final conclusions about these two aspects (funding and quality) in the western region’s higher education development.

So far, the national picture shows that CWHEDP might not contribute much to higher education funds (as well as some other sectors) in the western region, however, the western region has still been developing faster than the other two regions in terms of higher education student numbers and the environmental factors that potentially impact higher education. Thus, the author assumes here that, under the policy of CWDP, the western region’s general environment was developing rapidly, which contributed to the development of higher education; however, the higher education policy of CWDP (CWHEDP) did not contribute much to higher education development in the western region. There is a potential trend of HEIs expanding their enrollment without sensible planning in regards to obtaining more funds (see discussion about the variable of policy resources in Chapter 5.3.1 Model of six variables, which would explain why the western region was leading the rate of increase in higher education population among the three regions even though their rate of increase in funds was the lowest.

6.2.2 Local (provincial) picture
A phenomenon can be observed from data analysis among twelve provinces of western region that, the change of higher education performance in each province after the policy’s implementation was diverse. In the case of some indicators, the difference between the best performer and the poorest performer is quite visible. In the mean time, three provinces (Inner Mongolia, Yunnan and Qinghai) stood out for having either the best or the poorest results in several different terms of data comparison that serve as indicators for higher education performance. Inner Mongolia and Yunnan performed very well among all the western provinces, while Qinghai’s performance was typically one of the poorest in the region.

Secondly, higher education funding in these three provinces during the five years examined shows a pattern that is consistent with their higher education performance
as identified before. Inner Mongolia, which performed well, had the highest rate of increase in funds while Qinghai, which performed poorly, had the lowest. Yunnan, on the other hand, had an average level of rate increase in funds even though its performance was as good as Inner Mongolia. This suggests a possible linkage between CWHEDP and provincial higher education performance because increasing governmental funds is one important policy tool of CWHEDP.

Thirdly, although Inner Mongolia performed very well in a few indicators of higher education performance, it did not always perform the best. During the five years studied, Inner Mongolia not only did not reach the GER goal in its “The Eleventh Five Year Higher Education Plan,” but had one of the very lowest rates of increase in GER. Qinghai, on the other hand, reached its GER goal in “The Eleventh Five Year Higher Education Plan” and also had an average GER rate of increase. Yunnan reached its GER goal as well, and had the highest rate of increase in GER. Thus, performance was not always consistent with the funding pattern. This means that the possible linkage between CWHEDP and provincial higher education performance that was suggested by the last point is now challenged.

6.3 The influence of China’s Western Higher Education Developing Plan (CWHEDP)

In order to conduct a further investigation into the linkage between CWHEDP and the pattern of change in performance, the author aimed this investigation at the period of 2006 to 2010 (when most changes took place as identified in data analysis) and the provincial policy of CWHEDP (provincially, “The Eleventh Five Year Higher Education Plan”). The author adopted Van Meter and Van Horn’s (1975) policy implementation model and Kaufman’s (1973: 2) theory of three general explanations for a failed policy implementation to identify the factors that possibly affected higher education performance in each of the three selected provinces during the implementation of CWHEDP. Six variables of the model that may contribute to performance were analyzed in this case study of three provinces. Following this analysis, a new relationship map was drawn for this particular case study. This relationship map is somewhat different from the relationship map of the original model, which suggests that when applying the model in China’s case, certain factors
may change due to the very different social, political and economic conditions of the country. The new relationship map between the variables and performance is as follows:

1) Five variables are identified as influential to the differences in performance between provinces: policy standards and objectives, policy resources, inter-organizational communication and enforcement activities, economic environment, and the disposition of implementers.

2) In terms of the relationships between variables, policy standards and objectives and policy resources influence inter-organizational communication and enforcement activities; policy resources and inter-organizational communication and enforcement activities influence the disposition of implementers; the disposition of implementers has a direct influence on performance, and the other variables have an indirect influence on performance.

3) In the case of Inner Mongolia, economic environment shows the same influence on performance as other variables. However, in the case of Yunnan and Qinghai, economic environment does not have the same influence on performance as other variables, and it may even have a potentially negative influence on performance.

The case study comparing three different provinces in the western region was meant to more fully explore the relationship between final performance and variables associated with policy implementation, as well as the reasons for some provinces performing well and other provinces performing poorly.

In the comparison of different provinces in the western region, the factors that influence performance are policy standards and objectives, policy resources, inter-organizational communication and enforcement activities, economic environment, and the disposition of implementers. Among these, the disposition of implementers was shown to have a direct influence on the difference of performance levels in different provinces. The three factors of policy standards and objectives, policy resources, and inter-organizational communication and enforcement activities have a direct impact on the disposition of implementers, and thus have an indirect
impact on the differences in performance.

Furthermore, while viewing the western region as a whole, the condition of higher education is improving after the implementation of CWDP; however, the improvement is still not efficient enough considering that higher education funds are still growing slower in the western region than in other regions. As a matter of fact, in all three provinces under investigation, a lack of funds proved to be the common essential issue in terms of developing higher education. After CWDP’s implementation, the western region's education sector is actually receiving much greater funding than before and has the faster growing level of educational funds among the three regions. However, in the higher education sector, funding has grown much slower than in the other two regions. China’s higher education is mainly funded by the government, thus governmental officials who play the role of policy implementers have a great deal of influence on allocation of funds. The contradiction between total funds and higher education funds in the western region means that when allocating funds, policy implementers may have given less priority to higher education than other sectors. This conclusion is further supported by the comparison of the increasing rate of funds between different level of education. In other words, the disposition of policy implementers is an essential factor in final performance.

Combining an analysis of statistical data and a case study with the four common problems of policy implementation in China that have been introduced above, a conclusion can be drawn here about the factors that potentially influence performance in the western region:

1) The policy itself
Whether the policy standards and objectives are clear or ambiguous concerns how well the implementers can interpret the original meanings of the policy.

2) Inter-organizational communication and regulation for accountability and supervision.
The questions that concern performance include how the policy is passed on through different levels of implementation in organizations, whether the communication is sufficiently efficient and clear, and whether there is a well-established system for supervising the implementation process.
3) The disposition of implementers

The disposition of implementers concerns implementers’ view of the policy in terms of the importance of implementing the policy, the ways to allocate resources, etc.

Furthermore, on the basis of the comparison between different regions in the national picture, the author assumes that, under the policy of CWDP, the western region’s general environment was developing at a fast rate of speed, which contributed to the development of higher education; however, the higher education policy of CWDP (CWHEDP) seemingly did not contribute much to higher education development in the western region. There is also a potential trend of HEIs expanding their enrollment without sensible planning for the purpose of obtaining more funds (see discussion about the variable of policy resources in Chapter 5.3.1 Model of six variables, which could explain why the western region was leading the rate of increase in higher education population among the three regions even though their rate of increase in funds was the lowest.

Another assumption based on the analysis is that the disposition of implementers could be one determining factor for the success of policy implementation in the case of Western China, because allocation of funding is largely decided by implementers. Other influential variables identified in the analysis are all connected to the disposition of implementers, and ultimately the disposition of implementers has a direct impact on performance. Hence, the former assumption that CWHEDP did not contribute much to the development of higher education in the western region could also be the result of certain dispositions of implementers. Furthermore, China’s centralized administrative society could contribute to freedom in making decisions inside the government, which could potentially influence the disposition of implementers.

However, these assumptions cannot be proved without further detailed investigation and fieldwork in the western region, as well as exploration of implementers’ reasons for making certain decisions. These issues can be considered in continuing work on this topic.
There are also some additional factors worth considering in the case of Western China: the economic condition and characteristics of the implementing agencies, related specifically to the political system of China. So far, from the research in this thesis, the practical possibilities and resources for conducting further investigation of these two factors, such as detailed fieldwork in the three provinces, are limited. However, such studies would provide an interesting starting point for future research.
List of References


List of Internet Sources


Appendices

### Table 5.1.4a Increasing rate 2000-2006 (%)

<table>
<thead>
<tr>
<th>Region/Educational level</th>
<th>No schooling</th>
<th>Primary School</th>
<th>Junior Secondary School</th>
<th>Senior Secondary School</th>
<th>College and higher level</th>
</tr>
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<td>4.9</td>
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<td>26.3</td>
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</table>

### Table 5.1.4b Increasing rate 2006-2010 (%)

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<th>Region/Educational level</th>
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<th>Junior Secondary School</th>
<th>Senior Secondary School</th>
<th>College and higher level</th>
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<td>8.6</td>
<td>22.1</td>
<td>93.8</td>
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### Table 5.1.4c Increasing rate 2000-2010 (%)

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<th>Region/Educational level</th>
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<th>Primary School</th>
<th>Junior Secondary School</th>
<th>Senior Secondary School</th>
<th>College and higher level</th>
</tr>
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<td>144.7</td>
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