

Figure 2: From Central Goals to Objectives

Motives of the reformer	Underlying reform concepts	Objectives expected results
1. Reduce inequality of opportunity according to social background through eased transfer between different educational careers	Modernization concept	1. Structural reorganization of the German higher education system
2. Bring about social change through a more democratic decision-making structure and more socially relevant research	Radical democratic concept	2. Association and integration of different organizational and curriculum forms (University + Teacher College + Technical College)
3. Improve the capacity and performance of German higher education through short-cycle studies and adequate qualifications for the employment system	Technocratic concept	3. Equalisation of opportunities through articulation between different higher education institutions, widening the access to higher education
		4. Shortening of the length of studies, thus reducing the costs by increasing the number of students
		5. Curriculum reform, linking of theory to practice, improvement of the relation between education and employment
		6. Inner structural reform, a new faculty structure (one single body), development of interdisciplinary teaching and research
		7. More effective use of the personnel and physical facilities
		8. Greater interregional equality of opportunities in higher education

Figure 3: Goals versus Outcomes

Official Goals, Federal Law (HRG)* (1976)	Achieved or not achieved	Outcomes (1981)
1. Development of a differentiated but coordinated system of educational patterns of various levels, content and durations allowing for credit transfer-ability	(- / +)	GHS was not adopted as the organizational model for all German higher education institutions. Only 6 'real' GHS have been established, enrolling 5 % of the total German student population
2. Provision of a link between science and practical experience	(+)	GHS developed project-oriented studies, interdisciplinary learning and research and teaching geared to practice
3. More effective student counselling and guidance	??	Higher percentage of working class student at the GHS than at the university
4. Development of better 'higher education didactics'	(+)	GHS Kassel Berufspraktische Studien (vocational practice studies)
5. Better use of higher education facilities	(-)	Majority of students opted for larger university type of courses (5.2 years); expenses per GHS student similar to expenses per university student
6. Provision of research opportunities for leaders who had not benefitted from them	(-)	No integrated faculty and staff structure among short-cycle and long-cycle studies
7. Integrated planning of higher education	(-)	Existing universities remained separate. They did not want to be associated with new 'less' prestigious institutions
8. Inter-regional equalisation of educational opportunity	(+)	Increase in higher education enrollment in areas with previous low enrollment

* Hochschulrahmengesetz (Framework Act for Higher Education)

** It is questionable whether the larger number of working-class students results from better counselling or from the regional location of the GHS. The study does not talk about counselling or guidance.

- (1) Basically, an additional type of institution has simply been established.
- (2) Out of the 11 Länder, only two created Gesamthochschulen are approximating the pattern envisaged. They enroll about 5 % of the German student population (see Appendix, Table 1).
- (3) These institutions succeeded in extending university-type education to students not admitted to traditional universities and these students then achieved results comparable to those who were traditionally admitted (see Appendix, Table 2).
- (4) Some of the GHS, in particular Kassel, have succeeded in giving their courses a more practical orientation ("vocational practice studies" - Berufs-praktische Studien).
- (5) The vast majority of the students have opted for longer university-type courses, whenever they had a choice. This can be taken as an indicator of the failure to make short-cycle courses more attractive (consecutive and y-model; see Appendix, Table 3 and Figure 3).
- (6) The GHS were successful in serving a region and increasing the chances of students from blue-collar background in obtaining a university degree (see Appendix, Tables 4 and 5).
- (7) The GHS have not succeeded in developing an integrated staff structure uniting teachers of different status and discipline.
- (8) The GHS institutions did not provide "cheaper" education (expenditure per student; see Appendix, Table 6).
- (9) Presently the GHS are preoccupied with gaining recognition comparable to that of traditional universities ("academic drift").

3. Implementation, a New Research Area and Policy Analysis Approach

It is surprising to note that researchers such as Cerych and Teichler, otherwise quite cautious in comparing educational systems, adapted so freely in their European study a methodology which emerged from the American experience with its American federal policies, i. e. using the implementation analysis. Previously, in Germany, social reforms were analysed by using constraint analysis or program evaluation. Constraint analysis shows how an excellent idea failed because of unfavorable circumstances. Program evaluation, on the other hand, assesses the success of a plan/program by looking at its outcomes without being concerned with the reasons for success or failure. Both approaches mirror the planning euphoria of the 1970s when it was believed that social change could be planned, that an excellent plan would more or less automatically produce successful results. Thus, only outcomes were evaluated by contrasting them with the stated goals.

Implementation approach, however, views the outcome as the result of a bargaining process among the various actors. It emphasizes the process of carrying out a policy and explores the reasons for the deviations from the original goals. By doing so, the approach assumes that goals will "naturally" change during the process of program realization. Moreover, they could prove that changes belong to the nature of the reform process. Changes are "healthy" results of bargaining, of mutual adaptation.

While in the U.S. most implementation studies showed how federal reforms failed because of too grand goals, and thus criticized the government, in Germany, it seems that the use of implementation analysis has provided a relief function for engaged Social Democratic educational reformers. These reformers have been able to show that the governmental plan was after all not that bad nor totally unsuccessful.

Renate Mayntz (1980) shows how the development of implementation research is linked to the political reform era of the late 1960s:¹⁰

"As long as one doubts whether the government really intends to develop social reforms and whether it is willing and capable to pursue its proclamations, social scientists will focus on the content of policies and will analyze the political arena in which these policies were adopted. But once they trust the government's good intentions (as it was the case in the Johnson era with the 'war against poverty' or the

social-democratic coalition in Bonn around 1969), the research interest shifts to the realization of the well intended reforms. Then researchers are motivated to show the observed and anticipated failures and the final effects of the policy. This historical context of the implementation research explains first why reform studies focus on political reform programs with relatively clear goals rather than the execution of programs involving routine tasks by governmental bureaucracy. Secondly, the historical context accounts for the 'top down' view, the concentration on the government and the policy rather than on target groups or the social environment for which the reform was designed."

Mayntz goes as far as to state that political programs which aim at social reforms allow the social scientist a positive identity with the reform. Thus, research studies show an affinity to bureaucratic models and are centered around the analysis of control strategies from the federal to the local level.

In the following section I will briefly provide an overview of the fast growing implementation literature since the publication of Derthick's New Towns in Town (1972) and of Pressman and Wildavsky's Implementation (1973).¹¹ I do not intend to be exhaustive in the literature review but rather wish to present a systematic framework. The literature on implementation can be grouped into three distinct approaches and models according to their underlying assumptions about organizational behaviour and planning strategies:

- (1) the planning-control approach or managerial model,
- (2) the interaction approach or bargaining model,
- (3) the evolutionary approach or learning model.

In this paper only the conceptual framework of Renate Mayntz (1980) will be described in detail since her latest work on implementation has not yet been translated.

3.1 Planning-Control Approach or Managerial Model

This approach expects policies to have relatively clear goals. It examines how much of these goals has been realized, focusing on the program delivery process after the policy formulation. Success of a policy is measured against the policy's objectives. In order to plan for a successful implementation, factors influencing goal fulfillment are investigated and the identification of these factors results in the design of appropriate control

strategies. Consequently, the central issue of this research direction is the analysis of the relation between goals and outcomes and of the forces which bring about either a gap or an identity of the outcomes with the expectations. Majone and Wildavsky (1979)¹² point out that although this model recognizes an implementation failure due to an infeasible plan, it fails to acknowledge that constraints are only discovered during the implementation phase.

Sabatier and Masmanian (1979, 1980)¹³ are representatives of a planning-control approach to implementation in identifying three variables - tractability, statutory and non-statutory - which affect the achievement of statutory objectives. They suggest effective policy implementation through tight management control mechanisms (incentives and sanctions) by administrators. Their conceptual framework is based on a rational decision making model within a bureaucratic process.

This view dominates among the participants in the symposium on "Successful Policy Implementation" (published in Policy Studies Journal, 1980).¹⁴ The authors overemphasize the capability of law and ordinance to change the surrounding reality. They stress central regulation and control of hierarchies. They seem to view "independence" and "discretion" as a potential threat to successful implementation.

Elmore (1978, 1980)¹⁵ labels this top-down view as "forward mapping." Obviously he sees the federal government as the top, as the starting point of a chain of steps and the target groups as the bottom, as the very end. From this end the policy analyst should design the implementation strategies backward to the top, the actual beginning. In his 1980 article he argues that forward mapping "reinforces the myth that implementation is controlled from the top." He criticizes 'forward mapping' as an analytical strategy which treats only a narrow range of possible explanations for implementation failures."¹⁶ As an alternative to the planning-control approach he proposes 'backward mapping,' a non-hierarchical, informal, bargaining model.

His argument could be more forceful had he been thoughtful in his choice of words. "Forward mapping" suggests that the top is the actual beginning, the starting point of ideas and actions, while the target groups are backwards. His language still implies hierarchy and formality.

3.2 Interaction Approach or Bargaining Model

The interaction approach views policy formulation and program implementation as a single bargaining process with different actors at different levels. Each actor uses his power to influence the outcomes. Thus, the original goals inevitably change. Therefore, success of a policy is not measured by comparing outcomes with the intentions of policymakers but is regarded in all aspects as conditional. This model minimizes the importance of goals and plans.

Bardach (1977)¹⁷ has been among the first writers to conceive of implementation as the strategizing behaviour of various actors. Van Horn (1979)¹⁸ carries further this notion of tension and bargaining between different actors and develops a coherent framework categorizing influential factors at federal, state and local levels into three sets of variables (policy standards and resources, national policy environment, local policy environment). He views the relationship between federal, state, and local elected officials as shaping both the content of the policy and the events occurring during the implementation phase. However, he does not identify which actor controls which variables.

Similarly, Berman (1978, 1980)¹⁹ draws attention to the behaviour of different actors in different implementation settings. He distinguishes between a macro (federal) and a micro (local) level of implementation. Yet he mainly focuses on the micro level arguing that the outcomes of a social policy depend on local delivery. In his view a policy is successful when both the local organization and the policy mutually adapt to each other during the three phases of micro implementation (the mobilization, delivery implementation and institutionalization phases). Referring again to Elmore (1980) we can consider Berman's accentuation of micro-implementation as 'backward mapping'.

Elmore, who emphasises more the prescriptive side of implementation research, takes the micro-approach one step further and suggests starting the analysis at "the very last stage, as the specific behaviour of the lowest level of the implementation process that generates the need for a policy." ²⁰

Browning, et al. (1978)²¹ and Weatherly and Lipsky (1977)²² would agree with Elmore's focus on the non-hierarchical, the informal, the dispersal of control and the bargaining situation. Their theory of the street-level bureaucrats states that the coping patterns (routinizing and simplifying) of these men

and women at the policy delivery level substantially determine implementation.

Majone and Wildavsky (1979) disagree with the idea of the interaction approach "that the function of the implementation process is to satisfy the psychological and social needs of the participants, regardless of the actual policy results." They correctly indicate its weakness, saying, that "we feel the emphasis on consensus, bargaining and political maneuvering can easily lead to preconceptions that implementation is its own reward."²³ However, they indicate that the model "carries interesting evolutionary overtones." This leads them to propose their viewpoint of evolutionary implementation as a compromise.

3.3 Evolutionary Approach or Learning Model

The evolutionary approach declares that program realization is a process in which modifications of the original program continuously take place. Changes occur because (a) the actors consider them as necessary in certain situations or (b) conflicting goals demand a change. This approach assumes the initial plan is always incomplete and thus requires modification along the way during implementation. In the process, individuals attempt to learn new behaviour and the organization tries to learn how to change its coordination, control and information system. Success is relative. It depends on which viewpoint we take.

Majone and Wildavsky, the major representatives of the evolutionary approach, cope with the issues of complexity, confusion, haphazard development, irrationality and uncertainty by indicating that events continually occur and influence each other. The realization of a plan depends both on its intrinsic qualities (the underlying theory upon which policy problems are conceptualized) and on external circumstances. Accordingly, implementation influences policy, just as policy influences implementation. Wildavsky and Majone suggest that successful implementation must rely on *l e a r n i n g*, on "know how," on invention rather than on instruction and command. Discretion as a strategy is "both inevitable and necessary."²⁴

But what do we really know about learning? We know, for example, how a person can learn a foreign language. But what is necessary to make policy makers and implementers willing to learn? Under what conditions do they learn best with-

out control and sanction? Can implementation learning be institutionalized? Do organizations learn?

- As plausible as the evolutionary compromise approach appears it does not provide us with a clear framework for explanations.
- The sisyphus work of searching for analysis and action strategies must be repeated in every single case, over and over.

3.4 An Analytical Paradigm for Implementation Research

In her 1977 article "Die Implementation politischer Programme,"²⁵ Mayntz defines implementation as the execution of laws or the accomplishment of programs. At this time she saw implementation as separate from program formulation and presented three factors that crucially influence the implementation process:

- characteristics of the policy;
- characteristics of the implementation agencies;
- characteristics of the target groups.

During this early phase of German implementation research, only public administration organizations were identified and analyzed as policy implementers. By 1980, as a result of several research projects on implementation,²⁶ the definition was modified and the analytical paradigms were altered and expanded. "We speak of implementation when political goals are present and actions are intentionally undertaken for the realization of these goals."²⁷ Mayntz's modified analytical categories are as follows.

(1) The Different Types of Policies:

- There are distributive and regulatory policies.
- There are different intervention strategies (laws, financial incentives, promotion, process control mechanism, e.g., codetermination laws).
- Policy goals are often vague and contradictory.
- Programs differ in scope (time, content, local versus federal).
- The more open the design of a program the more likely will be the learning and adaptation process.

(2) The Implementation Structure:

German researchers distinguish between the implementation structure and the implementation field. The `i m p l e m e n t a t i o n s t r u c - t u r e` is the structured system in which the implementers operate. Contrary to the earlier view where `i m p l e m e n t e r s` are always governmental agencies, in the recent paradigm these are professional associations or independent local groups. But in most cases, they are organizations and not individual persons. The implementation structure is characterized by a non-hierarchical network configuration in which the actors know each other through former interactions. Consequently, previous conflicts as well as accumulated 'goodwill' will be transferred to the new program. Therefore, we have to distinguish between the formal and informal relations among the implementers. In addition, this network of organizations is more flexible, more adaptable and more clientele-oriented than the traditional governmental bureaucratic organizations.

(3) The Implementation Field:

The implementation field is the arena in which interest groups and the target population act. It is characterized by `u n f o r e s e e n e l e - m e n t s` which influence both the goals and the goal realization process. These events are stimulated by the attitude of the interest groups and target population toward the state and their acceptance of or opposition to state intervention.

These redefined variables are closely connected with the modified paradigms.

(1) Goals become more and more clear during the implementation process. An 'open' program creates a learning situation for all actors.

(2) The hierarchical-bureaucratic organization model does not fit the implementation reality. There are always non-governmental, non-hierarchical organizations which function as implementers. Besides, the state and the local level operate in certain fields with a high level of autonomy. In addition, administrators do not always behave in conformity to the goals. They are charged with the fulfillment of multiple functions and try to use the given resources or discretion for their own organizational purposes. The administration itself is under pressure to succeed and has only limited

tools to force the local level into changed behaviour patterns. Thus, the administration tries to avoid conflicts. But again, the behaviour of both the administration and that of the target group depend on the content of the policy.

(3) The mechanistic model of a planning-control approach must be exchanged for an interaction model functioning within a complex system. And yet, as Mayntz indicates, a real change of direction in the implementation research does not seem to have occurred. Only the focus has widened and the analytical paradigms of the bureaucracy theory and decision making theory in political science have proven to be inadequate for the reality. Indirectly, the rationalistic concept of planning became revised. Consequently, implementation analysis cannot clearly define success or failure of a policy. Success or failure can only be judged from an overall system's view of whether policies contribute to the long-term solutions of social problems or to the adaptation to a changed environment.

Mayntz admits that a theory still needs to be developed. It should not be an isolated theory of implementation alone, but rather must be part of a "Theorie politischer Steuerung der Gesellschaft" (a theory of political 'self'-regulation).

In summary, the literature on implementation illustrates a wide range of different opinions. On the one extreme, hierarchical control, central regulation, ability of the statute to structure implementation, the belief in the excellence of a policy, and "forward mapping" are emphasized. And, on the other extreme, dispersal of control, discretion, non-statutory local variables, social forces which capture and change the forces and "backward mapping" are accentuated. These views range from an optimistic belief in the "rationale" of the implementation process to a more sceptical uncertainty about the complexity and multiplicity of the process.

What approach does the implementation study of the Gesamthochschule adopt?

4. On Choosing an Implementation Approach

The authors Cerych, Neusel, Teichler, and Winkler select an 'open approach' for the analysis. They claim to have applied neither a strict planning-control orientation nor a strict evolutionary approach but rather to have collected information according to a list of 'influential factors' taken from available literature. Yet, looking at the structure of their study, a strong leaning towards the Sabatier/Masmanian rational decision-making model is obvious.²⁹

The researchers choose to focus on the course of events of the official sanctioned plans, announced in the 1970 version of the Federal Framework Law for Higher Education and passed in 1976. They compare the present achievements with the official federal and state goals and analyse the differences in terms of potential influential factors collected from the available literature. These clusters of factors are:

- the impact of changed socio-economic conditions and educational politics between 1970 and 1980 on the reform program;
- governmental implementation strategies;
- decision-making structures and processes within the GHS and between the state government, the universities and GHS;
- the influence of individual actors or groups of actors;
- the importance of financial resources.

The authors proceed in five steps:

- (1) They describe the context of the Gesamthochschul-idea.
- (2) Then they elaborate on the official goals and expectations.
- (3) In the next step, they survey the actual achievements (6 existing GHS) and identify the reasons for these achievements.
- (4) Then they compare the factors having led to the implementation of the GHS with those factors having caused the non-implementation of GHS. They describe those situations in which the government at one point had decided to establish the institutions and where some efforts were undertaken for launching the reform. (Here, we find Mayntz's definition of implementation as having these two components.)

- (5) And finally they compare their identified factors for the successful implementation in the two states (Nordrhein-Westfalen, Hessen) with each other.

With this procedure they hope to answer the question whether the factors identified as influencing the implementation process of social policies are identical with those relevant for the GHS reform.

Only six Gesamthochschulen are studied and not the eleven as we can read in Peisert (1979) (see Appendix, Table 1). These are the six GHS which comply with the basic concept of the reform: (a) accepting students from academic secondary schools and vocational high schools and (b) offering different degrees within one discipline. Five GHS (Duisburg, Essen, Paderborn, Siegen and Wuppertal) are in the state of Nordrhein-Westfalen and one, Kassel, in the state of Hessen. Bayern founded four comprehensive institutions which connected different types of courses under one administrative roof but did not establish any coordination or integration of corresponding non-university and university courses. Therefore, these institutions are excluded. (In the meantime some of them have already given up the name Gesamthochschule.)

The research group proceeds by focusing on a detailed description of goals and outcomes and on the forces which bring about either a gap or an identity of outcomes with the expectation. We recognize the close application of the planning-control model.

However, when it comes to the assessment of the outcomes the writers are aware that the evaluation is highly delicate and will differ totally according to the perspective adopted. And I would add: A decision about what is 'success' and what is 'failure' reveals more about the value of the researchers than about the reality of the object under study. Different interpretations of the present achievements are taken into account in the German publication. Two separate final analyses are presented: an insider view by the German research team, all from the Center for Research on Higher Education and Work at the Comprehensive University of Kassel and an outsider view by Ladislav Cerych of Paris, the director of the eight country comparative study. Cerych interprets the results in the light of the huge discrepancy between too ambitious and conflicting goals and their limited fulfillments. For

him the results of the GHS policy have been rather limited. He writes:
"No more than six such institutions approximating to the pattern envisaged at the outset were created. ... Though nowhere formally stated, the GHS enterprise as initially conceived is almost certainly at an end."³⁰

His assessment is fully based on the application of the planning-control concept and not, as the authors claim, on a "mixed model" of the planning-control approach and the evolutionary or learning model. Cerych neglects the learning process which the people involved undergo. To illustrate the point, I refer to the Pressman/Wildavsky study of the Oakland Project which is described in their book Implementation (1973). Two of the key people of the Economic Development Administration's employment effort in Oakland later became very influential in increasing minority employment. In their capacities as Board President of the Oakland port and as Major of the City of Oakland they could apply what they learned during the implementation of the Oakland Project.

I am not arguing that participation in the project caused them to seize a particular office - although they may have - I am arguing that people acquire during the implementation process personal resources which can lead to the actual goal fulfillment later than rationally planned.

Cerych also disregards the fact that any change in the educational system takes a long time to show its effect. Changes in an entire system involve changes in personal attitudes and behaviour and in organizational behaviour. He minimizes the 18 % participation of students from working class backgrounds; however, considering the German university has only 10 % working class population, 18 % is significant.

Neusel, Teichler, and Winkler, unlike the planning-control model, evaluate the results in terms of the situation before and after the existence of the GHS. Thus, they avoid taking official goals as the point of measurement. The German team interprets the results in the light of Mayntz's analytical paradigms: success or failure can only be judged from the overall view of the system. They assess the establishment of the comprehensive universities as a successful step towards a more diversified system of higher education. Those are a new type of higher education institution in Germany with differentiated and diversified course offerings. They are more adapted to the regions and they function

as agents of curricular reforms for a l l higher education institutions. By focusing on the situation before and after the existence of the GHS they broaden their frame of reference, taking into account the fact that goals change during the implementation process. In this respect they clearly apply the evolutionary model.

We can see how the choice of a particular approach determines the evaluation of success or failure, and one might argue that the researcher's choice depends on his/her knowledge of the subject as well as his or her attitude towards the policy as Mayntz has stated in her article. So far, the literature does not provide us with guidance choosing the right analytical approach for the content we study. Considering the choice of the analytical tool for research on higher education reforms, two hypotheses might be drawn from the study. Firstly, an o u t s i d e r though very knowledgeable about higher education, may be tempted to opt for the clearest navigable way through the multi-facet field of the German federalistic higher education structure. Thus, as a starting point, he might more easily consider the ideal model of implementation, assuming clear goals and rational strategies, as against a more "messy" analysis of networks of institutions and their historical relationships to each other.

Secondly, the German educational system is well known as a classical hierarchical system in which university governing statutes and even individual faculty appointments are subject to formal state approval. This fact might tempt an outsider to decide on a top-down planning-control approach while insiders, being au courant, can more easily take up the interaction approach functioning within a complex system. They know the networks among the different organizations and their relationships. They are familiar with the past interaction patterns of organizations and their present adaption to a changed environment. And therefore, success and failure of a policy can look different for an analyst coming from the 'inside' or for one coming from the 'outside.'

5. What Do We Learn for Future Implementation?

Implementation Analysis claims not only to be a method explaining failures or success of p a s t policy programs but also to be a tool for future policy implementation. As presented earlier in this paper each of the published implementation studies has tried to identify the major factors influencing the outcome of a policy. Similarly, in the German implementation study, Cerych and Sabatier identify variables which are influential for success or failure of a program. These are:

- nature of the reform goals;
- degree of inconsistency of the proposed reform goals with the established rules of the system;
- sufficient financial resources;
- degree of support by the implementers;
- degree of support from other actors and groups affected by the reform;
- the changing environment.

Here, I will only focus on the motive of the g o a l s and the f i n a n c i a l s u p p o r t and ask what we can learn from the study with regard to future higher education reform in Germany. According to Cerych the large discrepancy between intention and outcomes of the German Gesamthochschul-Reform is due to too large and conflicting goals. Thus, can we conclude that smaller goals, conforming more to the dominant educational policy trend are more likely to be implemented?

The study itself does not allow us to draw such conclusions. The more m o d e s t GHS plan, a c o o p e r a t i v e university, was n o t implemented. The cooperative GHS model suggests an institution where each principal constituent unit (university, teachers training college and technical colleges) maintains its autonomy. These units develop a loose association, with consultative links encouraging easier student transfer possibilities. This model was favored by the CDU/CSU parties.

All six existing universities are i n t e g r a t e d types of GHS. They provide study patterns corresponding to both the academic (long-cycle) and vocational (short-cycle) types of higher education. They have extended access to secondary school leavers who would formerly have been denied it.