

Lesson Study:

International Perspective on Policy and Practice



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教育科学出版社

Educational Science Publishing House

责任编辑 赵 萍
版式设计 贾艳凤
责任校对 张 珍
责任印制 曲凤玲

图书在版编目 (CIP) 数据

教学研究: 国际视野中的政策与实践 = Lesson Study:
International Perspectives on Policy and Practice/
(日) 的场正美, (英) 克劳福德, (伊朗) 阿拉
尼编. —北京: 教育科学出版社, 2006. 7
ISBN 7-5041-3314-0

I. 教... II. ①的...②克...③阿... III. 教育改
革—研究—世界—英文 IV. G511

中国版本图书馆 CIP 数据核字 (2005) 第 155219 号
北京市版权局著作权合同登记 图字: 01-2006-3491

| | | | |
|------|---------------------|-------|---|
| 出版发行 | 教育科学出版社 | | |
| 社 址 | 北京·朝阳区安慧北里安园甲 9 号 | 市场部电话 | 010-64989009 |
| 邮 编 | 100101 | 编辑部电话 | 010-64989234 |
| 传 真 | 010-64891796 | 网 址 | http://www.esph.com.cn |
| 经 销 | 各地新华书店 | | |
| 印 刷 | 保定市中国画美凯印刷有限公司 | | |
| 开 本 | 787 毫米×1092 毫米 1/16 | 版 次 | 2006 年 7 月第 1 版 |
| 印 张 | 16.75 | 印 次 | 2006 年 7 月第 1 次印刷 |
| 定 价 | 49.00 元 | 印 数 | 1-2 000 册 |

如有印装质量问题, 请到所购图书销售部门联系调换。

Chapter 9

Lesson Study: Impulses for Teacher Education and In-service Training in Germany

Friedrich Gervé and Astrid Kehder-Mürle

Introduction

Germany has a federal system of government. Public education from the kindergarten through to college and university is the responsibility of federal States which differ in their educational policies. This is manifest in the fact that curricula and school textbooks differ from one state to the next. Baden-Württemberg, for example, is the only state where students study pedagogics as part of a primary or secondary teacher education course in a special kind of university called a "Pädagogische Hochschule" (university of education). In all other states teacher training is integrated into universities. Figure 9.1 summarises the different types of schools in Germany.

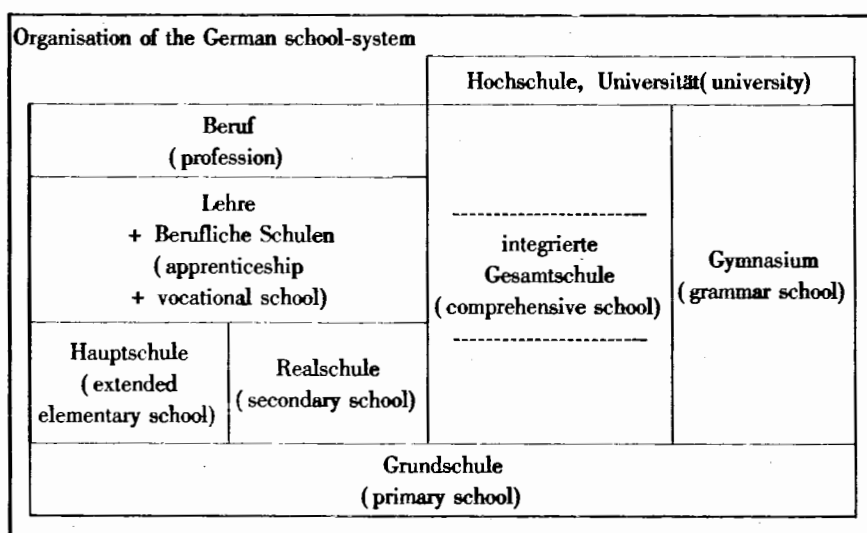


Figure 9.1 The German School System

Teacher Education in Three Stages

Teacher training for all types of schools is divided into three components. Often teachers in this field come from other professions and acquire appropriate supplementary qualifications.

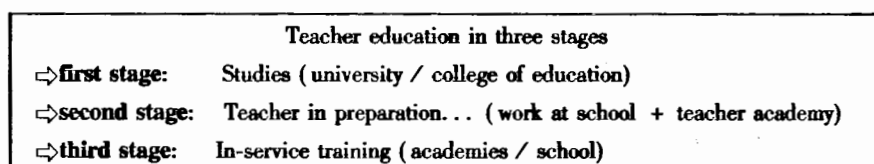


Figure 9.2

Teacher Training Studies

Teacher training starts with studies at a Pädagogische Hochschule or at a university where courses of study traditionally have a greater focus upon pedagogical issues including simultaneous practical training. The students acquire basic theoretical knowledge of school subjects and general educational

ideas and practices; they also gain a problem-orientated consciousness based upon theory. The next section of teacher training is based upon practical aspects and here it is a never-ending story to figure out the right balance between theory and practice.

Traditionally, universities in Germany see their task as providing a formal and theoretical education rather than a training linked to a profession. Imparting knowledge and methods of research in special branches of science is their main concern. Pedagogical questions are, therefore, of minor interest during the studies of future grammar school teachers who register at university to study two or three academic subjects. As a consequence of this lack of practical experience, students are now required to gather professional insights during a three-month work experience at a school as well as in a social institution or a firm.

Teacher in Preparation

After the conclusion of their studies teacher aspirants enter the second part of their training. Now they must be prepared to put their knowledge into practice. This part lasts for 1 ½ to 2 years. The aspirants teach lessons in schools and join classes once or twice a week at teacher academies where they receive further training in theoretical, pedagogical and methodical issues. This part of their training is strongly based on practical experience and at the same time absolutely essential for their final examination, the results of which are crucial for future employment. Unfortunately the theoretical knowledge aspirants acquire during their studies does not often correspond with the practical knowledge they gain in the second part of their training. If you ask an aspirant, you often get the answer that their studies have very little to do with practice.

In-service Training

In-service training is the third part of teacher professional development. During the first two stages teachers study one or two subjects very intensively, whereas other subjects are irrelevant. Although working at a school, the teachers have to teach lessons in many subjects so they cannot do it in a very professional way. In-service training seems to be of great importance although it is neither a fixed constituent of teacher work nor is it clearly structured. The supervision and evaluation of this training is not well developed, in contrast to the first two phases, this third phase remains voluntary.

Teacher In-Service Training

In Germany teacher in-service training is organised on different administrative levels. Federal Ministries of Education have the highest position in the hierarchy. At the district level the education offices organise

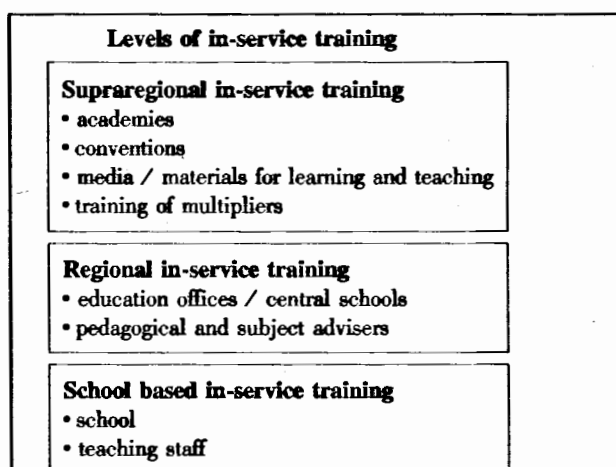


Figure 9.3

training. Individual schools form the lowest level. Besides these publicly organised and financed programs there exist private courses for which a school or individual teachers pays.

Supra-regional In-service Training

The States finance academies of teacher-training and institutes of education and school-development. This is the highest level of publicly organised in-service training. The academies organise supra-regional conferences and offer further training courses for teachers in all types of schools. Such supra-regional in-service training is usually organised in courses of several days and takes place in academies where the participants check in for the time of the courses and so are free from the pressure of everyday school life and able to open new, further horizons. Courses here reflect current educational tendencies and projects, for example the introduction of new curricula and the implementation of general structural reforms. In addition, expert trainers are trained at this level and later lead in-service training courses.

Regional In-service Training

Education offices, which supply an administrative district with in-service training, are responsible for the next level. Courses, lectures and symposia are offered and trained advisers offer additional courses on certain subjects or educational issues. The priorities lie in the area of new methods of teaching and are chosen for best practice-oriented learning. Long-term courses are popular because they are much more efficient.

School Based In-service Training

The lowest level is school based in-service training that is organised by the teaching staff of a school. Mostly it is financed from the budget of the school, thus, in the long run, by the municipality. Recent development has been strengthening this level. The new curricula, for example, provides individual schools with greater possibilities for self-development by creating their own school curricula. Thus in-service training has a self-guided structure and direction-making process. The great advantage of school-based in-service training lies in its proximity to local conditions, problems and individual concerns. Let us now have a closer look at primary schools. Here the training for teachers is primarily concerned with educational and didactic matters, whereas the training of secondary school teachers is more concerned with specific aspects of certain school subjects.

The Training Process

The professional experience of every teacher is the foundation of the training process. The initiative for training can come from outside, from special offers or from the expectations of the school, the school authorities, the parents or the students. But it can also come from inside, initiated by personal experiences or expectations or a wish for change or development.

In this case the starting point can be personal experiences or problems, questions or personal theories. In-service training helps teachers to develop their competence by actualizing, securing, expanding, differentiating or specializing their faculties. The result will be a strengthening of personal,

| The training process | |
|-----------------------------|--|
| Foundation | professional education and personal experiences |
| Initiative | <u>from outside:</u> education politics, education authority, expectations of parents and students <u>from inside:</u> experiences of personal limits, desire for development |
| Starting point | personal theories |
| Result | improvement – self-competence – social competence – methodical and professional competence |
| Transfer | from personal development to school development |

(comp. Miller 1992, 29)

Figure 9.4

social, methodical and professional competence. The training should achieve a continuous development of the persons and their work and, by transferring this to others; it can improve the development of the entire school community.

Characteristics and Forms of School Based In-service Training

In-service training:

- tries to achieve a concrete change in teaching, communication and working conditions at a school (activity-oriented approach);

- depends on the situation and the persons involved;
- has to rely on the active cooperation of all teachers;
- uses the chances of self-guidance in a group (characteristics of projects).

There are different forms of school-based in-service training. The whole staff may work on a special issue at short pedagogical conferences or on pedagogical days.

| Forms of school based in-service training | |
|---|-------------------------------|
| Pedagogical conference | full teaching staff |
| Pedagogical Day | |
| Subject section meetings | subject staff |
| Problem oriented teamwork | groups of interested teachers |
| Continuous courses | |

Figure 9.5

At special conferences smaller groups can regularly work on an issue over a longer period of time. The results are presented to the whole staff if decisions have to be made for the school. If necessary, external advisers, experts or moderators are consulted and as part of the training teachers can visit and observe each other while teaching their classes.

For training in the schools the starting point is usually a problem occurring in everyday school-life. First, the problem is defined, then the individual experiences concerning the problem are gathered and analysed. The next step, which is often taken by a working team, is to look for a way to solve the problem, to see the theoretical background and concepts, to find

experts and to decide how to proceed. A strategy is developed and prepared.

After this the results are presented and discussed within a wider group, decisions are made on how to solve the problem, a common plan is made, and tasks are allocated. The teams regularly exchange their experiences and analyse the difficulties and the improvements made. This process is moderated by a team or an external adviser. The project comes to an end as soon as a satisfactory result has been accomplished, or for the simple reason that other projects have become more important.

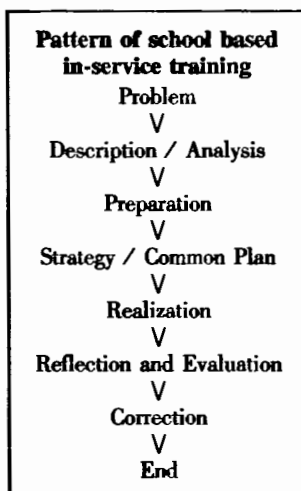


Figure 9. 6

Contents and Methods

School - based training programs , in most cases , deal with topics of personal or situational interest. In Germany the forming of a typical profile for every school is becoming more and more important. Here scientific issues are less significant and the emphasis is on didactic and methodical problems. As every school has to strengthen its profile, questions of organisation and communication are on the agenda too. Other important subjects are the teacher-student relationship, methods of instruction and learning and the administration of the school. A good working atmosphere, transparent structures, common aims and cooperation are more and more recognised as characteristics of a good school. Nevertheless, there seem to be some deficits in these fields since they are not really given much importance during the course of studies at universities.

School-based in-service training is a kind of project work: common goals

are determined and the whole process is self-organized and self-evaluated. The classical lecture becomes less important than active group cooperation in solving problems and developing materials. External experts are invited rather for the moderation of the effective use of the teachers' own potential than for explaining theoretical concepts. In this way practical measures are developed for the direct improvement of the individual school and its methods of teaching.

Problems

There are so many different offers of training that for schools it often seems quite arbitrary which of them to choose. Normally it is on a voluntary basis that teachers are involved in this kind of training, so there will be no common experience for all of them. Sometimes teachers may feel overstrained by the great variety of different offers. As a result they may think about retreating from such extra activities. Another problem that is somehow connected to the first one is the short-lived nature of these forms of training. They often lack continuity. Moreover, in many cases they deal with a very specific question without any broader view of general issues. In most cases there is no real evaluation after the training.

Another problem seems to be the unclear relationship between theory and practice. Of course training, as a rule, has to be practical but if we do not succeed in explicitly showing the scientific theory behind the specific methodical action we run the risk that the results of the training may not be permanent. On the other hand scientific theories, in order to be recognized as useful, should in some way be adaptable to the problems of everyday school life. If there is no convincing way of implementation people will hesitate to accept them. By outlining two examples from my own research some

exemplary principles of successful advanced training for teachers may be seen.

1. Regional Courses with Coaching of Local Teams (Gervé, 1997)

The topic of this advanced training measure was an introduction into open classroom learning. First, there took place a questioning of teachers of a school district where practice, attitudes and problems in relation to the open classroom learning were determined. Then three groups were formed. One group did not get any further training, a second group was introduced into the theory and practice of the open classroom learning during a three-day course. A third group got the same course, but later on formed local groups which were taken care of at their schools with two to three further visits at longer intervals .

The in-service education combined with the forming of local groups working closely together proved to be crucial for the measurable success of the last group compared with both other groups.

This third kind of in-service education was more successful if during the first weeks these groups were accompanied by an external moderator. For this no detailed further advanced training measures were necessary. At the group meetings the teachers reported their previous work to each other and planned the next action steps together.

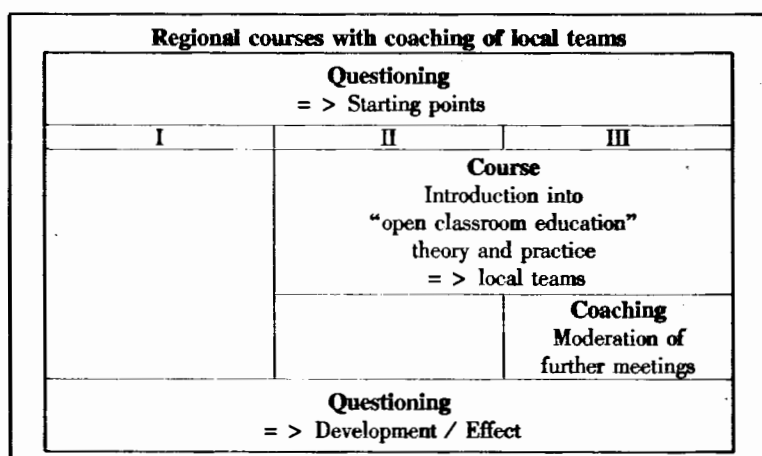


Figure 9.7

2. Participant-oriented Development of Instruction-materials and Implementation Concepts (Gervé, 1999 – 2004)



Figure 9.8

The topic of this advanced training course was the use of computer-based training for general studies in primary education. Courses were offered on different instruction topics from the subject area of general studies.

In a first afternoon course the participants, who had hardly ever used a computer in their teaching, were instructed in computer-based training. At a second term other media teaching aids were exchanged. Then instruction-concepts were developed in small groups. In this connection the participants were encouraged to integrate the new medium into their usual concepts so that they did not have to radically change these. The software was again revised and adapted to the needs of the participants. In a third step the small groups were offered individual support. It turned out that what was most important was to give confidence or advice. Subsequent interviews and the observations of the teaching quality were evaluated.

Results

As a consequence of the first example one could summarize that further training for teachers needs cooperation in stable local small groups. The formation of such groups can be effectively supported by external coaching. According to statements from the participants of the in-service training in the second project described above, several factors were essential for the success of teaching with the new medium:

1. The conception of the software, which should be adjusted to the requirements of "normal instruction" and which offers the students clearly structured possibilities of learning. The development of teaching materials should be adjusted to the needs of the participants.
2. The discussion in the group to prepare a certain project and the intensive moderation and technical support in the transfer of ideas for better teaching. Implementation should be planned

according to the needs of participants.

Impulses of the First International Symposium on Jugyou kenkyuu at Nagoya 2004

Different Starting Points-Common Views

International symposia attempt to widen views beyond the limits of one's personal working environment by an exchange of ideas and attitudes. In December 2004 at the First International Symposium on Jugyou kenkyuu in Nagoya, Japan, this was successfully achieved regarding the education and in-service training of teachers with a focus on the improvement of the quality of teaching. The contributions showed very different starting points and tasks in various countries. Thus, Iran has to organise an efficient teacher education and to extend it to the whole of the country; China, with its remarkable differences in living conditions and standards of education between different regions and especially between rural areas and the conurbations, has to develop and to introduce a common national curriculum. On the other hand European nations like, Great Britain and Germany, try to improve the education and the in-service training of their teachers.

Most new ideas for reform come from elementary schools. It was a close look at the process of teaching and learning in the classroom and the development of this process by cooperative planning and evaluation that united the different national perspectives. In all the examples one could see the strengthening of the responsibility and autonomy of the individual school. In this way strategies can be developed for the education and further training of teachers, strategies "on the job" (Iran), under very heterogeneous

conditions (China), with the aim of finding a substantial theory for well-tried methods (Great Britain), for the application of general pedagogical knowledge to work in the classroom (Germany).

Beyond the boundaries and cultural differences there seems to prevail a notion of learning as an active and creative process which above all manifests itself in action and which cannot be separated from the special situation and the development of the entire personality of pupils, students and teachers. The starting point for such learning is perception and learning is especially made effective by good communication.

Lesson-Study as an Element of School Development

The examples from Iran and Japan show very clearly how research in pupils' learning and teachers' activities in the classroom can have important consequences for the further development of schools. So lesson-study is not only an instrument of the evaluation of teaching but it also becomes a means for school development from grass-roots level.

The Focus on the Classroom Teaching-Learning Process

They do exist, pupils who are really motivated to learn, who are interested in what is going on, who are well advised, accompanied and perceived as learning persons, individually helped and socially integrated. Good teaching is founded on the observation and analysis of teaching-learning situations. This direct and focused observation provides a good and realistic understanding of the various processes and gives us the necessary knowledge to improve teaching and learning. If we have learned to perceive and analyse the subtle appearances, variations and structures, we will be able to understand them and then we can arrange the best conditions for starting the

process of learning. Later the field of vision may be widened and a general culture of learning may be developed. But in Japan, too, this culture of learning is more often found in elementary schools more than in secondary education.

Cooperation in Planning and Analysing

This may well be the most effective way of improving the quality of teaching where a group of teachers jointly plan a lesson; provide advice and modify and improve their practice. Then in the classroom this lesson is observed by all the teachers who may have different tasks, for example they may observe single pupil's reactions and behaviour. Moreover the lesson is filmed and well documented as the teachers write down every detail. In the afternoon these colleagues come together; they exchange their observations and analyse the lesson step by step. By comparing their experiences everyone can see how the same facts may be remembered and interpreted differently by other colleagues. Here the videos and the notes will probably help, and then new ideas and more effective ways of assisting every pupil will emerge and the next lesson can be planned.

Perhaps this intensive analysis may not seem to be the best way of evaluating teaching qualities but in fact the critique will rarely attack the teacher as it is quite obviously directed towards the improvement of the pupil's learning and everyone will certainly be impressed by the image of such an innovative school. But most important for a permanent optimizing is the cultivation of a critical cooperation as common ground for the pedagogical effort.

Moderation

There is the danger that a self-made development of learning strategies could lose sight of the broader field and the essential issues, and that it might lose its power by dealing with the details of certain subjects or relations. If there is no critical distance to your own work you could slowly drift into an aimless activity, sometimes even disturbed by rivalries or threatened by the loss of any guidance from a valid theory. Here an independent moderation could show these dangers; it could promote a readjustment and still guarantee that a teacher finds his own way. It is always the teacher's personality that counts. But a very critical analysis of teaching qualities can easily impair a teacher's self-esteem. Here an experienced and competent moderation will always focus on the process of learning and try to bring about a certain distance from the situation by referring to theories, by summarizing and providing a general outlook. This will ease the psychological tension and strengthen the willingness for cooperation.

Action Research

The cooperation of teachers, their planning and analysing will develop both their teaching qualities and their school. The inquiring mind, the observation and analysis of teaching will produce so many findings which can improve school life. Moderators from outside may help and outline the theoretical foundation and give new impulses. These are the essential characteristics of action research, but there still remains the evaluation of these processes in order to achieve a cautious generalization of the results and eventually to distil a theory from the experiences of the practical activities. Moderation and supervision of lesson-study based school development could

be the link between school and science, between teaching and its theory. By their action research the teachers will be encouraged to use the results to form valid theories, to improve and correct them and to see whether they can stand the test of everyday school life.

Conclusion

In spite of very different national situations, the idea of lesson-study seems to be effective. Originating in the reform impulse from primary education a new understanding of learning prevails which now focuses on individual pupils and teachers. It is not the instruction but the individual collaboration in an action based learning environment that is the new key word for cooperative research in teaching and learning. For the education and further training of teachers the need for a permanent reflection on practice cannot be overemphasized. The second key to success is cooperation. This cooperative work and responsibility is important on the levels of teaching, the education and training of teachers, and research. The International Symposium on *jugyou kenkyuu* was another impressive initiative in this field, and now we have to develop the methods for both a more systematic scrutiny of the observed and documented lessons and the cooperative planning and evaluation of teaching.

Outlook

Implementation into Everyday School Life

In-service training for teachers in Germany is relatively unstructured and not obligatory. For teachers it often looks like additional work. Therefore, it

is important to integrate in-service training for teachers into everyday working life, that means to define it as a fixed constituent of their tasks. This is only possible with visible relief in the area of administration and instruction. If advanced training becomes a fixed constituent of a weekly work of teachers they will be ready to spend their time on it. In Germany teachers normally work alone at home. A broad implementation of lesson-study conceptions, which are based on mutual auditing, common planning and evaluation of lessons, still seems to be rather difficult in Germany at present. Auditing of classes is felt to be an examination of the teaching person, since teachers usually experience it as an instrument of selection and control rather than a cooperative method of improving the teaching practice with regard to the pupils.

Interconnection with Regard to Contents and Continuity

In-service training often appears unstructured and, in its content, more or less arbitrary. For improvement more clearly coordinated and long-term curricula for in-service training would have to be developed. This should happen both on a central level and in individual schools. In-service training might take place less spontaneously. Each new educational or didactical idea is not always the best and, on the contrary, the realisation of well-known and relatively constant characteristics of a good school with a larger continuity would have to be pursued. Lesson-study conceptions seem to be a promising way as they aim at an improvement in the teaching-learning process with the observation of lessons supplying the tangible and immediate, a generally accepted definition of the criteria and aims of "good" teaching or a successful teaching-learning process will have to be worked out.

Implementation Research

From our point of view we need more action based research. This means research projects that consciously intervene in the development process and gain knowledge from the participants' observations and the reflection of these processes. Purely theoretical or only descriptive work and experiments under laboratory conditions may lead to a well-founded basic knowledge; however this only rarely includes the investigation of implementation conditions. The implementation of reform thoughts and models is necessary for the improvement of in-service training and the whole school practice.

It does not seem possible to implement lesson-study conceptions on a broad and lasting level unless their introduction is professionally organised and accompanied by research. A great chance of these conceptions, however, lies in the fact that they can be initiated during the first stage of teacher training by making the observation and analysis of lessons a central principle of school-practical periods and by thus cultivating an "attitude of research" among prospective teachers (see Crawford in this volume). This might be done in close cooperation with the training teachers at schools and, thus, might at the same time open a door towards the teaching staff at schools. Activity research needs exchange and the view from outside. International research communities like *jugyou kenkyuu* help to discover and understand national "teaching and learning cultures" and thus give incentives for change.

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