THE CONFERENCE METHOD OF INSTRUCTION

IN

TRADE AND INDUSTRIAL EDUCATION

by

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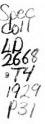
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PURPOSE.

The purpose of this study is as follows:

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3. To compare the conference method with other methods of learning.

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METHOD.

In addition to a careful study of the comparatively small amount of published material on the conference method, it was found necessary to send out three questionnaires as follows:

Form A - Sent to State Supervisors of Trade and Industrial Education. This questionnaire secured information on extent and growth of the work, etc. from 46 states.*

Form B - Sent to 209 Conference Leaders and others who had experience as leaders, dealt principally with methods of promoting and conducting conferences. Seventy-nine conference leaders contributed.

Form C - Sent to 280 companies where successful conferences have been held, secured information as to value of conferences and after results in further training. One hundred and sixteen companies responded.

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*Connecticut and Washington did not return questionnaires. Colorado's questionnaire was received so late as to make it impossible to include in the study.

Appendix A includes copies of these question-
aires. A very brief inspection of them will show
the extent and purpose of each.

Correspondence was conducted with several
men whose experience with the Conference Method
would supplement the literature on the subject.

PART I.

DESCRIPTION AND HISTORY OF CONFERENCE METHOD.

A. Introduction.

Imagine if you can a well lighted drafting room, the usual furniture moved out and a large table moved in. It was on the second floor of the office building of the Ash Grove Lime and Portland Cement Company at Chanute, Kansas.

It was 9:30 A.M. early in January of 1925. Seated in comfortable chairs around three sides of the table were about fifteen men. Some were dressed in overalls soiled with cement and machine oil. Others were more dressed up. These men were the foremen of the plant. Outside the windows one could see some of the activities of a plant in operation with all the foremen away and substitutes or assistants on the job.

At the fourth side of the table, sometimes sitting, sometimes standing at the blackboard behind him, was C. F. Klinefelter, Regional Agent for the Federal Board for Vocational Education and loaned to Kansas for two weeks to conduct the first Foreman's Conference in Kansas. Just what was going on has been summed up for us by Cushman (1927, Page 5) as follows:

"The conference ------ consists essentially of a systematic, the somewhat informal, thinking thru of problems by a group of experienced persons. The experience of the group members is the principal and most important element involved in the work of a conference group. There is no 'content' or subject matter to be <u>taught</u> in a conference and the leader should not be looked upon by a conference group as a teacher or professor. ------------ the person in charge functions as a leader of discussion rather than as a teacher in the ordinary sense."

The writer had the privilege of sitting in on these conferences which lasted for three hours each morning for ten days. The foremen present were well described by Lough (1924, Pages 508-10).

"The typical factory foreman has worked up from the rank and file and almost his entire training has been acquired in the haphazard pick-up school of experience.

His general education has probably stopped short with grammar school in about the 7th or 8th grade.

He is likely to be a pretty good technician, though mostly a rule-of-thumb man. In general he knows the routine of production and little more."

"A foreman," according to Mr. C. R. Allen, quoted by Stromgren (1928 Page 10) "is an experienced man with a relatively good acquaintance with his trade. His greatest

task is to gather, order and rightly use his experience, or in other words, to translate learning into action. The greater part of his practical knowledge is sub-conscious, and probably cannot be described by him upon the demands of anyone else."

With the foregoing pictures in mind we can consider just what is the conference method in vocational education.

B. Description of the Conference Method.

We naturally turn to the publications of the Federal Board for Vocational Education for important portions of the description of this method. The following shows the method as being a pooling of experience upon a common problem. According to Federal Board (1927), Bulletin 123:3)

"Conferring is the name of the educational procedure in which several persons, all of whom have had some experience in the same kind of work or business, discuss their experiences and opinions when trying to solve some problem arising in that business. The essential feature of the conference is the mutual interchange of experiences and opinions between those who have had personal experience with the problem being considered. Thus, a meeting of retail meat dealers for the purpose of discussing some trade problem, such as credits, grading, or testing would be a

kind of conference.

The purpose of the conference depends upon the nature of the problem being discussed--problem in this sense meaning any perplexing situation in a business in which one or more individuals are uncertain as to what to do. The members of a conference group may want to pool their experiences; they may want to decide upon the value of some practice; they may want to establish a standard way for doing something; they may want to agree upon some course of action; or they may want to correct some unsatisfactory practice or attitude. Whatever may be the immediate purpose, the collective judgment of the group on some problem is obtained through a general discussion."

According to Federal Board Bulletin (1927, 125:35), "The conference method calls for ------------- a situation where the combined assets of the group are adequate for the discussion or the decisions that may be under consideration." The term assets here used includes experience and knowledge. Cushman (1927, Page 7) says also, "An attempt to conduct a conference with a group of inexperienced persons is about as fruitful of results as to attempt to pump water with an air bound pump."

Additional description is given to us by the Federal Board (1921 Bulletin 61:18)

"Under the conference method men in small groups of not over 14 or 15 are brought together around a table under conditions where they can be comfortable and at ease. The relation of instructor and learner is not established between the group and the conference leader; that is, the conference program is not presented to the foremen as indicating that the management feels that they are not making good on their jobs and that the job of the conference leader is to teach them how to do their jobs better. On the other hand, the conference program is presented to the foremen as an opportunity for them to get together, to pool their experiences, and through discussion of them to develop better methods of dealing with their problems. The function of the conference leader under this method is not directly to instruct but to guide discussion and see that it heads up into definite constructive ideas which will result in improved foremanship in the plant."

The value of the Conference Method as a device for the organizing of the thinking of foremen is well expressed by Prosser & Allen (1925, Page 286):

"It is not an instructing device in the sense that it proposes in any way to add to the knowledge or experience of individuals. It is true, however, that by the pooling of the experiences and ideas of each member of the conference group, many things are learned. Its purpose is to

assist them in organizing this knowledge and these ex-
periences in such a way that they may be used more
effectively."

Foremen vary greatly in abilities and aptitudes which
makes pooling of experience of great value according to
Sanders (1926 Page 78):

"Experienced foremen know their jobs and handle their
departments in proportion as their abilities vary. One
foreman can accomplish more than others in the same plant.
Another has great success in handling help, while another
trains help easily. Now if the others can get a little
help from each of these men who have exceptional ability,
if they know and understand the methods the other members
of the group use to get successful results, they will all
improve the handling of their departments. They can learn
much from each other."

In what is known as a "Pure" Conference no new facts
are introduced according to the following quotation from
Federal Board Bulletin (1927, 123:3)

"The conference does not aim to get new facts, for
the members of the group are all familiar through their
own experience with the facts common in the problem being
discussed."

The description of the conference is well summed up in the general objectives of conference work as outlined by Cushman (1927 Page 10):

1. Securing a composite opinion which may be used directly in establishing a new policy or modifying an existing policy.

2. Modifying the viewpoint of some or all of the group members for the purpose of securing better team-work in the organization.

3. Helping each group member to analyze his job, identify his responsibilities and discover better and more effective ways of meeting his responsibilities.

4. Assisting each individual member of a group to organize his experience to the end that it may be of increased value to him on the job.

5. Making analyses of situations or cases involving joint responsibilities in order to secure a working organization.

The same author, Cushman (1927, Pages 174-6), gives us further summary in the following "Purposes and Aims of the Conference Method":

1. To promote active thinking about the job and its responsibilities.

2. To develop ability to visualize the job or to view the job objectively.

3. To develop ability in analysis.

4. To identify responsibilities and to consider ways and means of discharging them.

5. To utilize the past experiences and practical knowledge which the foremen have an apperceptive base upon which to build.

6. To build upon or increase job pride.

7. To increase (where necessary) a sense of responsibility.

C. History of Conference Method.

"It is a somewhat interesting fact," say Wright and Allen, (1926, Page 275) "that the Conference, which is now regarded as a discovery, is, as a matter of fact the oldest known method of teaching. The so-called Socratic method, as carried out by Socrates, was really a form of conference work, whenever he discussed matters with the group."

"In fact Plato's Republic was nothing more than a report of an imaginary conference. The underlying pedagogy of the conference is essentially that of Rousseau and in general, that of Froebel and of Pestalozzi."

The application of the Conference Method to the
training of foremen came as an accident according to Dr.
Charles R. Allen in a personal letter to the author of
this study, dated May 4, 1928, paragraphs from which
follow:

"The conference as an educational procedure is as
old as the hills and all this fuss about it is rediscover-
ing America. It practically represents the conception of
the educational procedure which is found in Plato's Re-
public and, as I see it, was practically smothered by the
introduction of German methods which dealt almost ex-
clusively with the giving of information and the use of
the formal lesson."

--------About 1919 Mr. James P. Munroe, at that time
a member of the Federal Board for Vocational Education,
who also happened to be a personal friend of mine, and who
is a manufacturer, had his attention drawn to the fact
that while great provision had been made for the training
of technicians and programs were being developed to train
the productive worker, little or no attention had been
paid to the foreman. He and I talked the matter over
from time to time, and I suggested that if we wanted to
find out what could be done to improve employed foremen,
we had better draw on the experience of some foremen.

As I recall the matter, Mr. Munroe happened to be on the train one day with an influential representative of the E. I. DuPont de Nemours Company and they got to talking about this question of foremanship training. As a result, the DuPont people agreed to allow me, as a representative of the Federal Board, to go into one of their plants and conduct a piece of research work. The plant finally selected was the old Harrison Plant in Philadelphia, where they had been making paints and heavy chemicals ever since the time William Penn founded the city, more or less.

Michael Kane, who is now educational director for the American Telegraph and Telephone Company, was employed by the Board as a special agent to work with me, and the DuPont people sent down Mr. I. R. Anderson as a representative of the company. My idea was to get a group of foremen together and see what they thought about the proposition. We explained what we were there for and asked for volunteers. Practically every foreman volunteered. We picked out, as I recall it, 21. This group met twice a week at five o'clock. The plant provided supper in the cafeteria and then we went to it.

I had no idea. The personnel manager had an idea

with which I did not agree, his suggestion being a series of lectures or something of that kind. This was my first experience in working "a suction pump" and, as you know, out of it came Bulletin No. 36, of which some fourteen or fifteen thousand copies have been absorbed. I subsequently tried to get some of that 'dope' into the "Foreman and His Job."

These foremen, without knowing it, set up what we now call the conference procedure. I did some more experimental work at Niagara Falls and learned a lot, particularly how not to do it. I had the usual experience of a pioneer, - I got the hard knocks. I passed my experience along to other members of the Federal Board staff and they proceeded to do a lot of work on the experimental and demonstration basis, which is pretty fully described in the annual report of the Board for 1925. Out of this work came the development of technique."

The figures in Part III of this study will show some chapters in the later history of the use of this method.

Education for foremen, by conference method or in other ways is of recent origin. When no one is interested in a subject few write upon it. Thus the Reader's Guide indicates the trend of interest in the foreman and his upgrading through courses and conferences.

The Reader's Guide 1910-1914 does not have the word "foreman" listed. This indicates that he was not of sufficient interest, even in such publications as Industrial Management, that his name may appear in the title of an article.

Then the World War commenced and in spite of the stress of manufacturing of munitions and war supplies his name appears in only twelve articles. In the 1915-1918 Volume of Reader's Guide in but two of the articles is a need for training indicated and then it is technical training that is suggested.

The word "foreman" appears in the titles of 27 articles in Reader's Guide 1919-1921 Volume. Nine of these are on the subject of training him for his job.

In the 1922-1924 volume the total number of articles has shrunk to 12; but it is significant that eight are on the subject of his training.

Tukey (1923, Pages 247-51) contributes the following in corroboration with the above:

"Apparently the organized training of foremen, was an outgrowth of the emergency training activities which had their inception during the war period. -----------As far as I can ascertain the first attempt at the organized training of foremen was made under the auspices of the

United States Shipping Board --------------. The idea was
taken up thruout the country in industries of all types
with the result that in the course of two years time
there was developed as wide a variety of activities of this
kind as it is possible for the human mind to conceive.

The training soon reached the fad stage and was sub-
ject to all the inconsistencies that are peculiar to the
various fads."

D. <u>Classification of Foreman Training Methods.</u>

This training whether "fad" training as Tukey calls
it or sound conservative work with foremen, divided itself
according to the following classification:

Classification of Foreman Training.

I Informational Method.

    a. Lecture.

    b. Foremanship courses.

II Class Room or Instructing Method.

    a. Foremanship Courses.

    b. Text Book Method.

III Conference Plan.

    a. Foreman Conferences.

E. <u>Comparison of Conference With Other Methods.</u>

1. <u>Lecture Method.</u> This method was probably the first
one to be used to any extent. Dodge (1927, Page 365)
gives us a picture of the method together with some of the
objections to its use.

"The lecture method is the method which first comes
to the mind of the average executive. The foremen should
know certain things which they do not now know. What more
natural than to call them together and get some expert on
the subject to tell them about it. An old time executive
once gave the writer the following directions as to how
such a lecture course should be conducted: 'Give it to
them straight from the shoulder and tell them what's what.
When you are through with the lecture adjourn the meeting,
don't allow any discussion, we're not interested in their
opinions.' Such methods may be the best way of issuing
orders but very little education will result. The above
is rather an extreme description of the lecture method
but even under the best conditions the lecture method
usually results in very little being accomplished. Educa-
tion is not a pouring in process through the eye or ear.
No education can result without a thinking process on the
part of the hearer. Even when thinking is done by the

hearer wrong ideas often result. Talk with two men who have listened to the same lecture and you will often find that they disagree in many points as to just what the lecturer said. On the other hand if it is possible to get certain ideas across to a given group of men by the lecture method there is no doubt but what that is the most efficient way of doing it. "Inspirational" lectures are sometimes successful.

In general, however, it may be stated emphatically that the straight lecture method is usually a very poor method of conducting foreman education.

Under the lecture method, according to Tukey (1923, Pages 247-51) the meetings are made up of large groups which are addressed upon subjects pertaining to industrial organizations although not always strictly applicable to the job of the foreman.

This method has the advantage that large numbers of men can be handled simultaneously and it lends itself best to obtaining prominent speakers.

The average foreman, however is not the type who can gain profit from lectures, nor is he particularly interested in generalities. He is anxious to obtain solutions as to how his job can best be done.

Klinefelter (1928, Page 307) in speaking of methods
of training foremen mentions what he calls the "arbitrary
set-up" type. The theory "proceeds on the basis that
management -------- has become well acquainted with certain
shortcomings and the need for further training on the part
of foremen and that management can accordingly formulate
courses of training arbitrarily chosen by self-style
management experts as being exactly what are needed by the
foremen."

"Courses constructed in harmony with this theory
have usually been built by having various plant executives,
technical experts and personnel men write on various
phases of the foreman's job. Such courses have been
placed before the foremen through such methods as letters
sent out periodically from a central source, lectures de-
livered by special lecturers or "high powered" executives,
books to be studied by the foremen in connection with
lectures, or discussions following upon the reading of as-
signments and as straight correspondence courses."

"Such courses embrace in their scope almost every
phase imaginable from the straight imparting of detailed
technical information through studies of various technical
processes or into personnel work, the handling of men,
theories as to wage setting, and rate -------- into the

final climax: the management of industry itself."

"An important phase of some of these courses is the prodigious use of ------------ high sounding platitudes -- ----------."

The author of this study had an opportunity to listen to a foreman who had conscientiously studied under these methods. He "spouted" platitudes every time a fresh topic came up for discussion. His subsequent contributions to the discussion invariably proved that his methods of handling men were at variance with the platitudes he had stored in his memory.

2. Foremanship Courses. These courses when taken as correspondence courses are purely informational courses. While the remarks of Charles R. Allen (1924, Pages 429-33) which follow, mention their use in a class, they apply with even more force when the opportunity for class discussion is removed.

"Organized training courses (for foremen) have usually been based upon some sort of an analysis of the foreman job out of which there has been developed an outline.

Around this outline there has been prepared a text or a set of notes usually accompanied by some form of prob-

lems, questions or other devices intended to promote the
ability to apply what is set forth in the text to the
specific problems of each foreman in his own special
conditions. -----------

There is no reason to doubt that work of this
character is of value. It assumes the ability on the part
of the foreman to study a text and to do a certain amount
of work outside the class. There is no doubt but what
many groups of foremen have been found who do this work
successfully. The objections to the general organized
foremanship course are practically the following:

1. A standard course does not fit all the special
   conditions in a given plant.
2. Much material is included in most standardized
   courses which really deals with the duties and
   responsibilities of a higher official.
3. Many foremen have lost the habit of book study.
4. The majority of these courses deal largely with
   the technical and production side of industrial
   work with which a competent foreman is already
   familiar so far as they affect his duties and
   responsibilities.

3. <u>Correspondence Courses</u>. In a discussion of con-
ference leaders and those training for conference leaders
at Blue Ridge in 1926 as reported by Sanders (1926, Pages
121-2) the discussion brought out the following merits of
the conference over the correspondence course.

CHART 1.COMPARISON OF CORRESPONDENCE COURSES AND CONFERENCES

Correspondence Courses	Foreman Conferences
1.Informational.	1.Develops constructive think-ing and an organization of the things already known so as to use them more ef-ficiently.
2.General problems and not specific problems are presented.	
3.All material not applica-ble to the men's jobs.	2.Works out the current diffi-cult problems of the group.
4.Taken too long to get de-sired information on particular problems (from home office).	3.Several hundred years of ex-perience "on tap" to the members of the group to assist them with their problems.
5.Requires considerable writ-ing which is often irksome to the men and causes them to lose interest.	4.Can discuss problems at the time when they are of most interest.
6.Material usually of such a nature as applies to high-er executives.	5.Common and understandable language used.
	6.Interesting.
	7.The foremen in the group get to know each other bet-ter and learn each other's problems so that a feeling of cooperation is developed.

4. <u>Class Room Methods</u>. The remarks of Charles R. Allen as quoted above apply here.

Dodge (1927, Page 365) terms this the Text Book Method and describes it and compares it with the lecture method.

"It is now possible to buy text books with the word "Foremanship" printed plainly on the cover. Many such texts have been published and to some executives the problem of education for their foremen seems to be simply the selection of the best text.

But no matter how perfect the text, something else is required. Buying texts for a foreman or group of foremen and doing nothing more would accomplish very little. In order to secure best results the foremen reading a given text should meet regularly to discuss the lessons as assigned. Under best conditions a competent man should be in charge of the discussion but regular meetings of the group should be held in any case. Text books for foremen may fail in two possible ways: (1) The subject matter contained in them may not be suitable. (2) The way in which the subject matter is presented may not be right.

Probably the text book method is more effective than the lecture method for handing out new information and

ideas, as the printed page may be read over and kept for later reference. However, it is very difficult to secure satisfactory text books as all illustrations should be made directly to that particular industry, and even if the ideal text book could be secured it would be of very little value for foremen education without an organized plan for conference or discussion based on the text."

Klinefelter (1927, Pages 1, 2) gives us a good explanation of some of the difficulties in making so called courses or texts fit into the needs of the foreman in connection with his training.

"In the case of ------- the regular organized courses in foremanship, which have been worked out and put on the market by various organizations --------a somewhat standard procedure has been followed for securing the material -------------. In the majority of cases, such courses have been built up by having high grade plant executives take certain phases of the foreman's job and write chapters on such phases as they saw the problem. In certain cases, university professors in sociology have been called on to write chapters on certain parts ------------.

While it is true that many of the higher-up plant executives, thus called upon to write their conception of certain phases ------ have --------- come up from the

rank of foreman themselves it is also true that with the
advent of their new executive responsibilities, extending
over a period of years, their viewpoint has been radically
modified from the viewpoint of an actual foreman on the job.
Hence it follows that a course which is constructed on
this basis ------- does not square at all with the con-
ceptions of foremanship held by actual foremen on the job.

Added to the above is the difficulty of working out
any sort of standardized course which will apply equally
well to all types and grades of foremen in different in-
dustries. -----------a standardized course has to be put
upon a sufficiently general plan to carry a wide appeal.
This means that it cannot be specific. ----------unavoid-
able in a course designed to be used with a wide range of
industries."

5. Conference Method. While this method has been
previously described it is well to quote authors here
who are conference leaders.

Klinefelter (1928, Page 307) discusses a theory or
method of training foremen which he calls the "trouble
shooting" theory. This theory proceeds on the basis that
a given group of foremen are their own best judges as to
their paramount needs, and that the topics which can be
most profitably considered with a given group-------------
will come spontaneously from the foremen themselves if the

person in charge is competent to handle the group properly.
-------------It is with a deliberate committment to this
theory that the conference method has been applied to the
problem of improving foremanship.

The conference method, according to Dodge (1927, Page
365) "necessarily implies a small group in which each
member feels free to state his own opinions or discuss the
statements of the leader or of any other member of the
group. As has been stated before, lectures and text books
are of very little value without organized discussion.
Now the question arises: Is it possible for the conference
or discussion method to be successful without use of
lectures or texts? There are many who would answer this
question in the affirmative and some would even go further
and claim that the use of texts or lectures would even put
a damper on the discussion. The writer is a firm believer
in the conference or discussion method but believes that
simple text material may be used to advantage in connec-
tion with a course or a series of meetings which are
primarily conference or discussion meetings. It is also
his belief that short lectures may occasionally be of
value if followed by an opportunity to question the
lecturer."

Dodge says above in effect, that the conference method should be only a part of the training program for foremen.

"The average foreman resents the idea of an outsider presuming to tell him how to run his department" according to Mann (1923, Pages 158-160). It's human nature. You or I would do the same. The success of this (conference) method lies in the fact that the foreman is not told but is led to think things out for himself.

Results come quickly. The foreman recognizes the very thing which has given him trouble and he finds the remedy right in his hands."

6. Common Objections to Conference Method. In fairness to the other methods discussed we introduce at this point some of the common objections to the conference method together with Allen's (1924, Pages 429-33) comments upon them:

1. It requires a person of special personality and ability to successfully conduct such meetings.

2. As it proposes no definite program a certain element of danger is introduced in that matters may be discussed which fall outside of the foreman's responsibilities and whose discussion may be undesirable from the standpoint of the front office.

3. Conference discussions do not involve instruction and frequently leave the subject under discussion hung up in the air without men being told in an authoritative way what they should do.

In answer to these objections Allen goes on to say "Where the conferences have been carried on by men who are able to act successfully as conference leaders, in the majority of cases both the foremen themselves and the general management have expressed themselves as having the belief that distinctly desirable results have been secured. ----------------The conference method will only succeed where there is opportunity for free discussion and where the relations between the general management and the foremen are good. -----------As stated above the program is elastic and follows those subjects in which the foremen themselves are interested."

7. Summary. As an excellent summary of the methods outlined in the foregoing we submit the following comparison chart: (Fed. Bd. Bull. 1927, 125:32)

CHART 2. CHARACTERISTICS OF THE THREE EDUCATIONAL PROCEDURES.

Characteristics	Procedure		
Objective----	Imparting information	Instructing----	Condcuting conference
Purpose----	To put individual into possession of information which he does not possess.	To assist an individual to acquire a mastery of a standard procedure.	To assist a group of individuals to do more efficient thinking on jobs calling for decisions.
Job of person in charge.	To get information into possession of individual class members.	To get individuals in the class so that they are able to do the job.	To assist the individual group members to do more efficient thinking.
Relationship of person in charge to the group or class.	Recognized as that of instructor and learners.	Recognized as that of instructor and learners.	Recognized as that of presiding officer of the conference.
Chief asset of person in charge.	Possesses information or knows where it can be secured.	Can do the job----	Can do efficient straight thinking himself and preside efficiently.
Psychological conditions.	Absence of information on part of class members.	Absence of job ability on part of class members.	Possession of experience, job ability, and information by group members.
Working conditions.	Group can be taught as a unit.	Group can be taught as a unit.	Educational results purely individual.

(Chart 2 continued)

Operating Mechanics.	Visual or oral presentation or use of source material.	Formal lesson steps.	Steps in constructive thinking.
Source of content---	Other than the group or class.	Other than the group or class.	The group.
Content determined by	Correct information possessed by learner.	Correct performance of job by learner.	Intelligent, efficient thinking by group.
Test of accomplishment.	Learner can reproduce information.	Learner can do job unaided.	Group members can handle situations better.

The Federal Board in a recent publication (1927, Bulletin 125:35) has given us an interesting analysis of the various methods of training foremen.

CHART 3.   THE DIFFERENCES BETWEEN CONFERENCE WORK AND OTHER EDUCATIONAL AGENCIES.

	Menial Attitude		Problem Originates			Treatment		Objectives					Thinking done by		Results	
	Passive	Active	Foreman	Management	Outsider	Special	General	Information	Inspiration	Specific efficiency	Promotion	Job	Foreman	Somebody else	Increased Knowledge	Increased ability to think
1. Conference ----	--	x	x	--	--	x	--	x	x	x	x	x	x	--	x	x
2. Series of lectures	x	--	--	x	x	--	x	x	x	--	--	--	--	x	?	--
3. Disconnected lectures followed by group discussion.	x	x	--	x	x	--	x	x	x	--	x	--	--	x	?	--
4. Addresses on papers by plant officials or experts.	x	--	--	x	x	x	x	x	x	--	x	x	--	x	x	--
5. Foremen's Clubs.	x	x	--	x	x	--	x	--	x	--	x	x	x	--	x	x

	Menial Attitude		Problem Originates			Treatment		Objectives					Thinking done by		Results	
	Passive	Active	Foreman	Management	Outsider	Special	General	Information	Inspiration	Specific efficiency	Promotion	Job	Foreman	Somebody else	Increased knowledge	Increased ability to think
6. Outside letter service.	x	--	--	x	x	--	x	x	x	--	--	--	--	x	x	--
7. Commercial Courses Y.M.C.A.& the like	x	x	--	x	x	--	x	x	x	--	x	--	?	x	x	x
8. Regular meetings between Management and foremen on current difficulties.	x	x	--	x	--	x	x	x	--	x	--	x	--	x	x	x

Klinefelter (1928, Pages 308-10) says, ---------the persons advocating the use of the conference method ------ have no quarrel with persons advocating other types or methods of attaining the same results even when a set course is laid out by plant executives --------. Such a course may be the thing most needed in a given case. There is undoubtedly a legitimate place in the educational program for foremen for practically every method and type of course which has been advised up to the present time ------.

Klinefelter in closing his paper emphasized that "the conference method is not advocated as a universal panacea. It is a method which will work quite effectively under certain circumstances and for certain purposes. -------the conference method as applied to improving foremanship is pre-eminently valuable in stimulating intelligent, active thinking on the part of the foreman on all phases of the world-old problem of handling the human help efficiently and satisfactorily to all concerned, as well as in production problems which cannot be reduced to standard procedure but must be solved by a consideration of all available factors, resulting in a national decision or plan.

Dr. C. R. Allen in a letter to the author of this study under date of December 19th submits Figure 1, with

Relation of the Conference to other Educational Procedures.

Figure 1.

Labels in figure:

Modified from Efficiency in Education Wright and Allen.

Dotted Line – "Path" of Conference Leader

100% New Stuff

New Stuff Old

New Old Stuff

All Old Stuff

Information of Experience only

Formal Lesson — Informational Approach

Formal Lesson — Development Approach

Chief Working Area of a Conference Leader

Theoretical Conference

Apperceptive Base for Objective

Varying Educational Situations Calling for Varying Educational Proceedures

100

0

the following clear explanation, showing where the various
types of educational procedure fits into the complete
training of foremen.

If we let verticals represent increasing increments
of apperceptive base or the sum of all the experiences
and information possessed by an individual or by a group
of individuals, and if we let the horizontal line rep-
resent varying educational situations, it is obvious that
at the extreme left-hand of the bottom line there will be
no information and no experience; consequently, the only
thing that can be done is to add information or experience.
As we progress toward the right, we obviously find an in-
creasing amount of experience or information or both,
which is already in the possession of the individual or
of the group, as indicated by the hypothenuse of the
triangle.

The base line of the triangle of course represents a
continuous change in the situation, but for the purpose
of convenience I have indicated two intermediate points.
The first of these points represents a typical situation
where the instruction and procedure call for what would
be the formal lesson, using the informational line of
approach.

The second vertical line within the triangle represents a situation where the apperceptive base has grown to such a point that the formal lesson, using the development line of approach, can be used. When we come to the altitude of the triangle we would have a situation where all necessary experience and information was in the possession of the group (or of the individual, where it was a case of dealing with an individual.) This is the situation which enables a one hundred percent conference to be carried on.

It will be noted then that the difference between the development lesson and the conference is determined by the fact that while a considerable proportion of the apperceptive base is in the possession of the group or of the individual, there is a certain amount of such experience or information which must be added, in the case of the development lesson, whereas in the case of the situation which is typical of the use of the formal lesson, with the informational line of approach, the amount which is to be added is very large compared with the apperceptive base.

I have indicated these facts on the same diagram, (Figure 1) by four squares. In the case of the situation indicated by the extreme left-hand of the triangle, obviously anything which is added is new stuff. In the

case of the second situation, going toward the right, it is evident that what is added constitutes a very large proportion and the apperceptive base a very small proportion as indicated by the relative size of the two areas.

In the third situation the case is obviously reversed. What is added forms a relatively small amount as compared with the apperceptive base, as again indicated by the two squares. In the last case, at the extreme right, which indicates the true conference situation, obviously nothing new is added, the effect of the conference simply meaning the re-evaluation or further consideration of the facts and experiences already in the possession of the group.

A study of this diagram is convincing proof that, as Klinefelter, (1928, Page 308) says, "The persons advocating the use of the conference method-------have no quarrel with persons advocating other types or methods."

According to Lough (1924, Page 508-10), "No single pedagogical method should be over-emphasized to the exclusion of other sound methods-------that each method has its special advantages and also its clearly marked limitations. Good pedagogy, judged by actual results, requires for the general run of foremen in the general run of American industrial plants a training that combines

in one system the valuable contributions of both personal study and group conferences. --------- a fourth element that was found helpful, tho it is not absolutely essential is the use of lectures largely for their inspirational value."

We agree with Lough in his view. After an intimate knowledge of foremen, having worked under them, been one, and observed and lead conferences, our judgment is that the conference should precede and then run concurrent with personal study and lectures thruout the time that a foreman continues to attempt to improve his ability as a foreman.

A foreman views with suspicion, at first any attempt to teach him anything. He takes it as a reflection on the way he is handling his job. Often he is perfectly honest in his attitude, not realizing how little he knows of foremanship and technical processes in his department.

8. Developmental Teaching Compared With Conference Method. Teaching by the developmental method may look to be the same as a foreman conference. It is not however, the same thing at all. According to Klinefelter (1927, Page 45), "when teaching by the developmental method, new material is being taught. ---------in a foreman conference no new material whatever is presented

while a true conference is in session.

Conferences of (young) foremen and understudies training to be foremen would include more instructions from time to time than would be necessary with experienced foremen. As far as the experience of the group would go it will be a conference. When experience breaks down the leader could not conduct a conference but must by some teaching means furnish the information needed."

Mr. Klinefelter has furnished us in his report (1927, Page 74) the following chart comparing developmental lesson and conference procedure, the chart having been developed originally by Mr. Cushman in a conference for training conference leaders at Omaha, Nebraska, May, 1926.

CHART 4. COMPARISON OF DEVELOPMENTAL LESSON AND CONFERENCE PROCEDURE.

	DEVELOPMENTAL LESSON	CONFERENCE
Purpose	To teach a man something which he does not know.	To help a man to think out a problem drawn from his experience.
Person in charge	An instructor or teacher.	A leader of discussion, a teacher who can do this special type of teaching.

Procedure	The recognized instructural process following the steps:
	1. Preparation (getting ready)
	2. Presentation (putting over)
	3. Application (try-out)
	4. Test (check-up) and some-
	    times –
	5. Generalization.
		The conference procedure:
		1. Assembling facts.
		    a. First-hand experience.
		    b. Second-hand experience.
		2. Selection of functioning facts.
		3. Evaluation of functioning facts.
		4. Making a decision.

Methods	1. Suggestive question. 2. Demonstration. 3. Illustration. 4. Experimental.	Conference devices such as: 1. Cases, various types. 2. Analysis. 3. Discussion. 4. Rating table. Graphs. 5. Questions, various types. 6. Majority opinion.
Results	Members of class have definitely added to their knowledge or skill, or both, with respect to a job requiring active thinking in advance of what they knew or could do before.	Members of conference group have carried on constructive thinking with respect to problems and situations with which they are already familiar. Nothing has been added. What they knew has been organized better.

Points of Similarity	Past experience and knowledge or skill already possessed is used as a basis on which to build up additional knowledge and skill and active thinking.	Past experience is utilized. This experience is analyzed and organized in order that it may be of maximum utility in dealing with new problems.
Points of essential differences	1. Instructor follows an organized plan. 2. Instructor actively teaches. 3. Class recognizes relationship of instructor and learner.	1. Leader has general plan which is 100% flexible and is adapted to whatever way discussion may work out. 2. Leader guides discussion. 3. Relation not set up and not implied.

PART II.

THE FEDERAL BOARD PATTERN IN PRACTICE.

After a brief study of the questionnaires received from conference leaders it became evident that there are a variety of methods used with foremen which are called "conferences" by the leaders and others. In order to have a basis of understanding we shall take as a pattern what the Federal Board considers to be a pure conference. We can then compare the methods used by leaders, as indicated by their answers to questionnaires, with this pattern and so determine how closely this pattern is being followed by the leaders who are meeting with success in the field. To secure this pattern we have gone to the writings of C. R. Allen, and Frank Cushman, who are responsible to a large extent for the development of this method, to the publications of the Federal Board and to reports written by agents of the Federal Board who conducted conferences.

A. Planning for Conferences.

1. Intensive or discontinuous conferences. Methods of conducting conferences can be classified into one or the other of two types of organization according to the

Federal Board for Vocational Education (Bulletin 1927, 125:44):

    a. The intensive organization. According to this organization, the foremen are brought together for a period of time, usually one or two weeks, and give their time entirely to conference work, the work being carried on for six or seven hours a day.

    b. The discontinuous series. According to this organization arrangements are made for the foremen to meet for a certain amount of time once or twice a week. The time has usually been two hours and two meetings a week, but this has not always been the case, the time in some cases having been reduced to one and one-half hours, and the meeting taking place but once a week.

"It will be noted that according to both of the above types of organization, the men meet entirely on company time.

As distinguished from this there is another type of organization whereby the foremen meet on their own time, either immediately after the close of the working day or more frequently in the evening.

The fourth type of organization has been to have both the foremen and the company contribute time. One typical organization of this kind is where the foremen attend the conference during the last hour of the working day and an additional hour on their own time, making a total of a two-hour meeting. Often, under this arrangement, the company furnishes supper to the foremen.

Experience up to date has indicated that the intensive organization is by far the more efficient, and that the evening class is probably the least efficient. Some of the most successful work that has been done has been through either the intensive organization or through the daily two-hour meeting on company time.

The conference leader who has occasion to take up the question of organization with the management will frequently find that at first there is strong opposition to carrying on the work on company time, usually for the reason that it is stated that it is impossible to take the men off their jobs. Repeated experience has indicated however, that this is not a real difficulty, as work on company time has been repeatedly carried on without any detrimental results in the plant."

"With the above as our pattern or organization it

will be of interest to see how the conferences are conducted in the field.

Conference leaders were asked*, "Do you prefer the intensive type of foreman conference held daily for two weeks or the week to week type, held once a week for ten meetings? Why? The replies are summarized below:

CHART 5. CONFERENCE PLANS.

No. of Leaders	Plans Preferred.
26	Intensive.
37	Week to week.
1	Intensive followed by week to week.
1	Two or three meetings a week.
3	Every other week.
1	Weekly or monthly.
1	Intensive in single industry but weekly with mixed groups.
4.	No preference.
74	

On the face of the answers received the intensive plan, considered by the Federal Board as most efficient,

*Question 1; Questionnaire B; Appendix A.

is not as popular in the field as the discontinuous or week to week plan.

An analysis shows that of the 26 leaders in favor of the intensive plan only 7 are from industry. Fourteen of the 37 leaders in favor of the discontinuous plan are from industry. The remaining 23 leaders are connected with vocational education in some capacity.

Reasons for choice are of interest and a few are given in the following chart:

CHART 6. REASONS FOR CHOICE OF CONFERENCE PLAN.

No. of Leaders	Intensive Plan	No. of Leaders	Discontinuous Plan
7	Better continuity of thought.	12	Gives foremen time to think things through.
2	Less carry-over between meetings. Subjects kept alive.	1	More thorough than intensive which hits the high spots.
2	Better attendance.	1	Usually preferred by foremen.
9	Easier to maintain interest.	8	Gives foreman an opportunity to try out some of the ideas.
1	Discussion is better.	1	Men do not get stale.
1	Minds kept more active.	4	Work can be absorbed more readily.
1	More accomplished in a given number of hours.	1	Education is not a force-feed proposition.
1	Less disconcerting to the management.	2	Companies will agree to this plan but refuse the intensive.
2	A subject can be carried thru to some conclusion while it is in the minds of the foremen.	1	Gives foreman time to formulate questions for discussion in advance of meeting.

A study of the foregoing answers shows good reasons for the stand taken by these experienced leaders. It is therefore true, probably that in some organizations the intensive plan works best while in others the discontinuous plan is best, with the greater number of leaders in favor of the discontinuous plan.

Since, however, only one plan can first be applied to any group there is no real possibility of prediction as to whether or not the best plan has been used on the maximum of results secured. It remains an open question to be solved by each leader as he thinks best.

2. Size of Conference Groups. Mr. Cushman (1927, Page 55), states from his experience, "It is difficult to get the best results with fewer than ten men in a group and when the number is increased to more than 20, other difficulties are encountered.

From 12 to 15 appears to be the ideal number according to the Federal Board (Bull. 1928, 127:7).

Klinefelter (1927, Page 82) gives us an explanation of the need for carefully limiting the size of the group.

"Probably fifteen is the ideal number. If there are less than twelve there will be a lack of experience to pool. If there are more than eighteen in the group it

becomes too large and will break up into small groups when topics of interest are being discussed. These little groups are known as 'side shows'. ------eighteen being the dead line for even an experienced leader to attempt to hold in one group."

Leaders were asked as to their ideas of an ideal sized group.* Answers are summarized in the following chart.

CHART 7. IDEAL SIZE OF GROUPS.

No. of Leaders	Ideal Number in Group
45	15 to 20.
24	Less than 15.
10	21 to 33.
79	

More than half of the 79 leaders replying favor from 15 to 20 as an ideal sized group. The second choice is the smaller rather than the larger group. This expression of opinion is in fairly close accord with the pattern as set up.

Leaders were asked** as to the largest group handled successfully. To our surprise we find that the numbers

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*Question 2; Questionnaire B; Appendix A.
**Question 3; Questionnaire B; Appendix A.

ranged from 120 down to 12 in the group. The average
number reported was approximately 27. Twenty-eight lead-
ers mention groups in excess of 25 in the group. Only 12
leaders mentioned groups having from 12 to 15 members.

If we are to accept Klinefelter's suggestions as
quoted above, the leader's average is much too high when
compared with the pattern as he sets it up.

In reply to the question,* "What is the smallest
group you have handled successfully?", the replies are
summarized in the following chart:

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*Question 4; Questionnaire B; Appendix A.

CHART 8.   MINIMUM SIZE OF CONFERENCE GROUPS.

Leaders Reporting	Minimum in Groups.
1	3
7	5
4	6
5	7
12	8
2	9
Total 31	
18	10
4	11
14	12
5	15
1	16
2	17
1	30
Total 45	

While 31 leaders report success with groups from three to 10 in size, 45 or more than half of the 76 leaders report 10 or more as the minimum size of a group.

Thirty-one leaders show results with less than the minimum as suggested in the pattern of the Federal Board. The remainder are closely in line with the suggestions of

the Federal Board.

3. Quarters for Conferences. Sanders (1926, page 115) tells us a room should be set apart in some convenient place either in the factory offices, club rooms, Y.M.C.A. or the like. Under no conditions should the meetings be held in public school buildings, as experience has shown that it is best to get away from the thought that these meetings have anything to do with school work."

An added reason for avoiding school buildings is the usual rule forbidding smoking in them. Cushman (1927, page 55) says in this connection, "In view of the fact that a conference is a type of organization set up for the purpose of helping a group of men to analyze their jobs,------ pool their experiences and think out their problems, the degree to which the men are at ease and feel free from all artificial restraints determines the probability of worthwhile work. -----------Many foremen can think better and take a more active part in the work of a foremanship conference if they are perfectly free to smoke when they wish to. In other words the men should feel 'at home.'"

Leaders were therefore asked,* "Where do you prefer to hold conferences, in the plant, Y.M.C.A., Chamber of

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*Question 7; Questionnaire B; Appendix A.

Commerce, public school, etc.?" Their answers are summarized in the following chart:

CHART 9. PLACE FOR HOLDING CONFERENCES.

No. of Leaders	Place Preferred by Leaders.
62	At the plant.
1	Not at the plant.
2	Anywhere away from the plant but not in school buildings.
1	If in one industry in plant.
2	Daytime meeting at plant and public school in evenings.
3	Y. M. C. A.
1	Chamber of Commerce.
1	Public building other than school.
3	No preference.

Leaders are very much in agreement that conferences should be held in the plant or at least outside of public school buildings. In this respect they are in accordance with the experience of Federal Board representatives.

4. <u>Time of Day of Conferences</u>. Cushman (1927, Page 58) says, "Better conference work can be carried on with men during the regular working day, than is ordinarily possible if the members of the group are tired out as the

result of having done a full day's work. ----------the
company really purchases an interest in the work by making
it possible for the foremen to meet in conference during
working hours."

Sanders (1926, Page 116) reports, "Experience has
shown that best results can be obtained if the meetings
are held---------just before the lunch hour or immediately
after it. These hours leave the foremen with a limited
amount of worry regarding the conduction of his department
during his absence. Holding meetings in the evening
should be avoided, if possible, as the men are tired------
and are often in poor humor."

Klinefelter (1927, Page 83) suggests when conferences
are held on the company's time-----------:-

1. Let the foremen get the work started in their
   departments before a conference begins.
2. Give time to finish up the work of the day in
   departments after conference.

Leaders were therefore asked,* "Do you prefer morn-
ing, afternoon or evening hours for conferences?" There
were replies from 26 leaders who prefer the intensive type
of conference. Results are summarized in the following

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*Question 5; Questionnaire B; Appemdix A.

chart:

CHART 10. HOURS FOR CONFERENCE UNDER THE INTENSIVE PLAN.

No. of Leaders	Hours Preferred for Conferences.
10	Morning.
4	Afternoon.
5	Morning or afternoon.
1	Evening.
3	No preference.
2	Not reporting a preference.
25	

In comparison we submit the following chart showing replies from those leaders who favor the discontinuous type of conference:

CHART 11. HOURS FOR CONFERENCE UNDER THE DISCONTINUOUS PLAN.

No. of Leaders	Hours Preferred for Conferences.
11	Morning.
14	Afternoon.
4	Morning or afternoon.
8	Evening.
2	Afternoon or evening.
5	No preference.
8	Not reporting a preference.
52	

It is presumed that conferences under the discontinuous plan are most often held in evening hours. It is interesting therefore to find that leaders much prefer the morning or afternoon hours to evening. This is in line, again with the authorities which have been quoted.

5. <u>Length of Conference Sessions.</u> *Under Item 1, "Intensive or Discontinuous Conferences", we quoted the Federal Board's description of the intensive conference as one where foremen give six to seven hours a day to the conference. Under the discontinuous plan it mentions two hours twice a week.

Klinefelter in speaking of the intensive conference says, ---------"no definite time can be set for the length of a conference. Experiments have shown-----------three to four hours a day for ten days is the usual length-------. For a discontinuous series he states, "The usual plan is a two hour conference session twice a week."

Sanders (1926, Page 116) suggests, "Successful conferences have been conducted using from one to eight hour periods. The length of periods depends entirely upon conditions. It is generally thought best to hold meetings from one to four hours in duration. If meetings are held

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*Page 49

over two hours, rest periods should be allowed as foremen usually are not accustomed to being seated for such a length of time."

Leaders were asked*, "How long a conference session do you consider most effective?" The replies are summarized in the following chart:

CHART 12. EFFECTIVE LENGTH OF CONFERENCE SESSIONS.

No. of Leaders	
10	1 to 1½ hours.
55	1½ to 2 hour sessions.
4	2 to 3 hours.
2	4 hour session.
1	6 to 6½ hours.
1	6 hr. intensive, 2 hour discontinuous.
73	

It is evident from a study of the above chart that most of the leaders are in favor of short sessions.

6. Attendance of Higher-Ups. The Federal Board reports (Bulletin 1927, 125:115) as follows: "It may be stated in general that the experience of good conference leaders has been that the presence of a representative of the management in the group does not do much if any harm

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*Question 6; Questionnaire B; Appendix A.

except possibly in the case of the first one or two con-
ferences. Under those conditions, the absence of the
management would be desirable. One of the chief real
difficulties of having representatives of the management as
members of the group is that they are very apt to dominate
the group, get into an active discussion, and consciously
or unconsciously tend to exercise authority with regard to
the matter. In other words, they are so accustomed to
exercising authority that they tend to continue the atti-
tude of authority in the group, just as an individual with
a teaching experience behind him tends to revert to in-
structional methods when they should not be used. This is
probably a source of more real difficulty than anything
else involved in the question of bringing representatives
of the management into the group."

Klinefelter (1928, Page 310) from his experience ad-
vises: "Successful conferences have been conducted on
numerous occasions where representatives of the management
participate. A number of instances could be cited by the
author (Klinefelter), however, where conferences have been
a failure because of the fact that direct representatives
of the management were in the group and the foremen ac-
cordingly refused to contribute or made statements for the
benefit of the management which they did not at heart

endorse."

Leaders were asked*, "Do you encourage or discourage the attendance of higher-ups in conference sessions?" Their replies show a great difference of opinion and are summarized in the Chart which follows:

CHART 13. SHOULD HIGHER-UPS ATTEND CONFERENCES?

No. of Leaders	Attitude of Leaders
16	Encourage attendance.
40	Discourage attendance.
7	Neither.
2	Depends.
65	

Unlike many of the topics under discussion in the study the leaders seemed to have decided views on this point. The larger number seem to agree with the Federal Board as quoted.

A group of conference leaders at State College, Pa.,** in discussing this point thoroughly analyzed the advantages and disadvantages in the following chart:

*Question 8; QuestionnaireB; Appendix A.
**Proceedings of a Program of Foreman Leader Training, 1928, State College, Pennsylvania.

CHART 14. EXTENT OF PARTICIPATION OF HIGHER-UP AND
RESULTS OF PARTICIPATION.

	Advantages	Disadvantages	Policy
Welcome: 1.As visitors and observers.	1.Favorable impression of fore-men by management.	1.Fear in presence of manage-ment caus-ing smoth-ering of discussion.	1.Not until conference procedure is well establish-ed.
2.If selected by the fore-men.	2.Acquaint management with Fore-man's problems formerly unappre-ciated.	2.Diffidence due to limited a-bility to express thought.	
3.Minority in number and not dominant in discussion.	3.Proves the interest and sup-port of management.		
4.As partici-pants.			
5.Politely ex-cluded.			

The advantages and disadvantages of this procedure
are well set forth above and while "circumstances alter
cases" the recommendation of this group as set forth in
the fourth column seems to be good advice.

7. <u>Use of Stenographer in Sessions</u>. Cushman (1927, Page 26) states, "Complete stenographic reports of conferences of the type under discussion------------are of negative value. The mere presence of a stenographer in such a meeting tends to inhibit free discussion. Most persons think twice if they know that a verbatim record is being made. Moreover a stenographic report of a conference of this type would be of little if any value to anyone.

Sanders (1926, Page 106) says, "A misunderstanding is liable to result and set a conference back if you have a stenographer or an outsider taking notes. Usually it is best to wait until the ice is broken before having notes taken at all. Then it is often best to have the group select someone to take down the charts which are on the board and the leader make out the rest of the report from memory."

Leaders were asked*, "Does a member of the group or stenographer do this?" (Take notes of conferences for report.)

In reply we found that only 13 out of 53 have a stenographer take notes in the meetings. Here again the recommendations of the Federal Board experts are pretty

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*Question 10; Questionnaire B; Appendix A.

largely followed.

B. <u>A Set or Elastic Conference Program</u>.

1. <u>Phases of Conference Development</u>. Sanders, (1926, Page 103) states: "We have gone thru three phases of foreman conference development as follows:

a. Make a preliminary study of the plant to determine weak points and set up a series of topics to be discussed in the meetings which will help to correct these conditions.

b. The conference leader has a set of points for discussion but doesn't force his program even if he thinks it might correct weak spots. He is guided by the interest of the group.

c. No program in the mind of the leader. He lets the interest of the group determine what the topics shall be and how long they (the group) shall continue on each topic.

Some one of these plans seems to fit any situation. The first appeals to the management which usually thinks that the men need to be taught something.

The second plan has resulted in much successful work. This is the best plan for the beginner to use until he has become experienced.

The third phase requires a very high-class leader to be successful. .Most leaders are not well enough qualified to carry on under this plan. They can start it but they cannot bring a conference through successfully."

The Federal Board in a recent report (Bulletin 1927, 125:48) quoted below amplifies the foregoing from Sanders and adds a fourth or newer method:

"The first method consists in selecting a series of fixed subjects. These subjects are, in series, submitted to the foremen for such discussion as they may develop. Of course, if a subject fails to arouse any interest, it is not forced by the conference leader. He passes along to another subject. In general, however, under this scheme his job is to make a reasonable effort to have this series of fixed subjects discussed.

The second method has consisted in making a sort of survey of the foremanship conditions in the plant and picking out subjects which were considered as being particularly important for discussion, as bearing on weak points, or points especially essential to efficiency. This method was adopted for example, in one large concern where a committee of superintendents and the State man sat down together, and as a result selected certain subjects,

which they felt would be particularly important to take up
with the foremen under special conditions. The conference
work as conducted in that organization in a number of
plants was based upon this program.

The third plan, which was used extensively several
years ago, consists in opening the discussion with a "safe"
subject which is pretty sure to promote interest or, if
the first subject does not promote interest to pass im-
mediately to another one, and after that letting the suc-
cessive subjects develop naturally out of the discussion.
An experienced conference leader can do this very easily
because in any discussion there will crop up matters which
he can catch and can subsequently use to start another dis-
cussion. Under these conditions each subject naturally
develops out of the preceding one, and the subjects dis-
cussed and their order is determined almost entirely by
the group.

The fourth method, which embodies the latest practice,
consists in having the foreman analyze out their responsi-
bilities at the beginning of the first meeting. Following
the securing of such a partial list of common responsibil-
ities, the group members then arrange them in some order,
such as according to their relative importance, diffi-
culties encountered in discharging them, or whether their

satisfactory discharge consumes an excessive amount of time. In this way a tentative program is set up for group consideration on the basis of the group's own analysis of the situation, and the responsibilities can be discussed in the order of difficulty or excessive time, as best suits the group, while other topics may come up and be handled at any stage. This plan for determining the topics for discussion in a series of conferences, which is sometimes alluded to as the "trouble shooting" method, is entirely flexible and is directly based upon the theory that any given group of foremen are their own best judges of what should be discussed in order to meet their needs."

2. <u>Use of Set Topics</u>. Mr. Klinefelter (1927, Page 42) says, "Some conference leaders use set topics and direct the discussion along the lines of the topics selected. To the extent that they do this, they are not running a bona fide conference. It is much better to ask for the topics which are causing the foremen difficulty."

Leaders were asked,* "Do you select in advance the topics for discussion for a series of conferences, or do you depend upon the interest of the group?"

The following is a summary of the answers of 75 leaders to this question:

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*Question 21: Questionnaire B; Appendix A.

CHART 15. SELECTION OF CONFERENCE TOPICS.

No. of Leaders	Method of Leader.
26	Select topics in advance.
3	Select topics in advance but seem to draw them out of the group or "steer them to select them."
1	Select topics in advance but don't announce the fact.
1	Select topics in advance to provide continuity.
15	Topics selected in advance but not always followed or changed to suit the group.
1	Selects 2/3 of the topics.
47	Sub-total.
2	Select first one or two topics and then depend upon the interest of the group.
8	Use both methods.
1	Uses both methods but prefers to depend upon the interest of the group.
11	Sub-total.
3	Depends upon interest of the group with a list ready if needed.
10	Depend upon the interest of the group.
4	Report then allow the group to suggest topics.
17	Sub-total.
75	TOTAL.

It will thus be seen that:

    47 Select topics to a greater or less degree.

    11 Use both methods.

    <u>17</u> Leave selection of topics to the group.

    75   Total.

A study of the foregoing chart also shows that over half of the leaders (32 out of 75) select the topic in advance according to #1 under Mr. Sander's outline or #2 under that of the Federal Board. Fifteen leaders follow #2 on Mr. Sander's outline or #1 as outlined by the Federal Board.

Only 17 leaders out of 75 use the later type conference method described as #3 by Mr. Sanders.

Since the advantages of all methods have been fully explained in the quotations given we close the discussion of these replies with a further quotation from the Federal Board (Bulletin 1927, 125:49):

"In proportion as a conference leader tends to slip into the instructorial attitude, he will tend to want to work with a fixed series of predetermined subjects, and he will also incidentally tend to want to give information where the information is already in the possession of the group, and only needs to be brought out and organized. As he gains in experience he will find it easier and easier

to adopt the fourth method*, which is unquestionably the most efficient of the four under ordinary working conditions."

Klinefelter (1928, Page 307) gives a clear explanation of the reasons for this desirable flexibility as follows:

"A conference leader when operating a conference does not attempt to force a group to confer about something in which they are not really interested. If he persists the conference will cease. He may go ahead and attempt to lecture them on some topic in which he thinks they should be interested but in such a case he is using the lecture method. The foremen are directly on the job. They know their limitations and where they would appreciate a little outside assistance."

There are, Klinefelter continues "many difficulties and problems existing in the minds of foremen of which the management is often times entirely unaware and which no outside 'expert' could possibly anticipate."

3. <u>Setting Planned Topics Aside</u>. A measure of the flexibility of a program is whether or not set topics will be set aside for those of greater interest. Therefore the question was asked of the leaders,**"If you select topics

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*See page
** Question 23; Questionnaire B; Appendix A.

for discussion do you allow the group to discuss another
topic which 'bobs up' and in which there seems to be a
lively interest?" The following summary of replies is of
interest:

CHART 16. ALLOWING "LIVELY" TOPICS TO TAKE
PLACE OF "SET" TOPICS.

No. of Leaders		No. of Leaders	
45	Yes.	5	No.
1	Yes, its their meeting.	1	No, keep them on the track.
1	Yes, if discussion lags.	1	Yes, if it has any bearing on the subject. (equivalent to "no").
2	Yes, if it seems worth while.	2	Keep new topics for future meetings.
2	Yes, but work back	1	No rule but prefer to stay on the subject.
8	Perhaps and sometimes.		
59		10	

While we found from replies to the previous question
that 47 out of 75 prepared a list of topics in advance, a
study of the answers above shows that leaders find that it
is good policy to set aside a topic at any time for a
topic of greater interest.

This shows a readiness on the part of more than half of the leaders to depart from a set plan and to make it a real conference of foremen upon the topics which most interest them. This is in line with the Federal Board Pattern as indicated by the following from Cushman (1927, Page 24), "It is, in the opinion of the author, exceedingly poor practice for a conference leader to adhere rigidly to a stereotyped outline. The actual values derived from conference work are in direct proportion to the interest of the group members. Successful and experienced conference leaders do not hesitate to scrap their pre-arranged plans, outlines and operation sheets and figure out a different procedure right in the midst of a conference, if such a move seems necessary in order to hold the interest of the group."

C. Conference Devices.

Klinefelter (1927, Page 11) tells us,---------"the leader also has what might be termed a bag of tools or special devices, corresponding to jigs and fixtures, one or another of which may be selected by the leader to handle a given situation at a certain time. Some of these--------will work in one place and do very poorly when a leader attemps to use them in another situation."

1. <u>Devices Commonly Used</u>. In a Federal Board (Bulletin 1927, 125, Page 33) we have an excellent pattern given us as to just what constitutes Conference Devices and at what phases of the conference they may be best used. This is quoted as follows:

"The chief objective of a conference is to train the group members by repetitive experiences in the habit of thinking through different problems in terms of

1. The assembling of facts.

2. The selection of facts.

3. The evaluation of facts.

4. The making of decisions.

5. The development of a plan; and

6. The execution of a plan.

Evidently a conference will go through six stages corresponding to these six steps. The first four of these are essentially mental; the last two involve activities of some kind other than purely mental activities.

Experience has indicated that the various devices which have been developed are particularly serviceable in certain stages of the conference. Chart 17, which follows, indicates the probable maximum value of various devices for different typical stages of the conference.

CHART 17. CONFERENCE DEVICES FOR THE DIFFERENT
CONFERENCE PHASES.

I. The assembling of facts.

1. Cases by conference leader.
2. Cases by group members.
3. Direct statements by conference leader.
4. Suggestive questions by conference leader.
5. Direct statements by group members.

II. The selection of facts.

6. Discussion. Suggestive questions. (4)
7. Analysis of work of various types.
8. Built-up list of functioning facts.
9. Illustrations by group leader. Cases by group members. (2)

III. The evaluation of facts.

Cases by leader. (1)
Cases by group. (2)
Direct statement by leader. (3)

III. The evaluation of facts---Continued.

Suggestive question by leader. (4)
10. Pro and Con. Analyses and other types.
11. Rating table.
12. Qualitative graphs.

IV. The making of decisions.

13. Suggestions from group as to various possible solutions.
14. Majority opinion.

V. The development of a plan.
Discussion. (6)
Pro and Con Analyses(10).
15. Analysis of advantages and disadvantages.

VI. Execution of plan.

16. Report back results to group.

Leaders were asked*, "What are the conference devices that you are using successful conferences (See Cushman Text)? Please list these in the order of more frequent use."

*Question 33; Questionnaire B; Appendix A.

Their replies have been summarized and compared with the list of most important conference devices as given us by Cushman (1927, Page 29) in the following chart.

CHART 18. CONFERENCE DEVICES COMMONLY USED.

No. in Cushman's List	List of Devices. Cushman.	No. of Leaders Using the Device
1	Cases by leader.	27 (Note 1)
2	Cases by group members.	26
3	Direct statements by leader.	17
4	Questions by leader	25 (Note 2)
5	Direct statements by group members.	21
6	Discussion.	25
7	Analysis, various types.	27
8	Built-up lists of functioning data.	18
9	Illustrations by leader.	18
10	Evaluation of data by rating.	18
11	Graphs.	20
12	Suggestions from group.	19
13	Majority opinion.	18
14	Summary or report.	12

Note (1). In addition to report the following were given by leaders:

Leaders	Report
2	Actual cases.
1	Hypothetical cases.
3	Cases.

These could have been added to the totals for either #1 or #2 as reported by Cushman.

Note (2). In addition to replies reported the following were given by leaders:

Leaders	Report
2	Questions.
5	Direct questions.
6	Indirect or overhead questions.
3	Questions by group members.

In addition to the list of devices as given us by Cushman (1927, Page 29) the following devices were reported as used by leaders:

CHART 19. ADDITIONAL DEVICES USED BY LEADERS.

No. of Leaders Reporting	Device Reported.
2	Demonstrations.
1	Call for comment.
1	Setting up situations.
1	Finding remedies.
3	Dramatization.
1	Acting by conference leader.
2	Direct discussion by leader.
1	Special lectures.
1	Individual reports by members.
1	Taking negative angle to provoke discussion.
1	General conclusion by leader if necessary.
2	Problems.
1	Projects.

The above list is submitted as a matter of interest. The author of this study feels that it indicates a haziness in the minds of many leaders as to just what are conference devices. Further evidence of this is indicated by the fact that only 38 out of 79 experienced leaders made any attempt to give this information. Others gave such comments as:

"Haven't the book."

"It is too much work."

"Circumstances alter cases."

"All and then some."

Mr. Cushman's list included 14 devices. One leader reported the use of 19. Two leaders reported only two. Eleven leaders reported 14 or more. The average number of devices reported was 9.

In closing the discussion we quote Cushman (1927, Page 29) as follows: "In carrying out this conference procedure there are certain devices that have been found to be of value. A conference leader should be thoroughly familiar with these devices and know when, where and how to apply them to conference work."

It may be that the leaders, responding to our questionnaire, have conducted conferences for so long a time that the procedure is automatic with them and they find it difficult to recall just which devices they use.

2. Lists vs. Analysis. The author of this study has been privileged to examine many reports both of actual conferences and of leader training conferences. He has also "sat in" upon the work of several conference leaders.

The general tendency of leaders, as he has observed them, were to pull out long lists of functioning facts

and either to have the group discuss them or to evaluate them by some rating plan.

In 1926 he was privileged to attend a leader training conference and during a two week's period the same procedure was followed.

Since that time the use of analysis of problems, type situation or actual happenings in the plant has come to the fore in reports of foreman conferences and in leader training conferences.

The Federal Board (1927, Bulletin 125:51) gives us an excellent pattern for such formulas and their use. Their description follows:

3. "Formulas" Use in Conference Work. "In carrying on conference work there are certain successive steps through which the conference leader will guide the discussion. It has become customary to speak of these steps as being controlled by formulas. At the present time there are three of these in common use. The first may be designated as the "thinking-steps formula." According to this formula the conference leader guides the discussion through the following steps or phases:

1. The securing of information.

2. The selection of functioning facts and the rejection of non-functioning facts.

3. The evaluation of facts.

In the discussion on the successive steps of the conference--------these constitute three successive mental steps which may be followed by the fourth mental step--the making of a decision--which in turn may be followed by the formulation of the plan and the carrying of that plan into action with a final checking up as to the way the plan worked out in practice.

The second formula has been based upon the following lines of development:

1. Supervisory responsibilities.

2. Managerial responsibilities.

3. The defining of the managerial problem; and

4. The determination of ways and means for dealing with this problem.

This formula found considerable use in the early stage of the conference work, but has found less use recently.

The third formula involves the following successive steps:

1. The identification of the difficulty.

2. Causes of the difficulty.

3. Remedies for the difficulty.

At the present time these three formulas are the basis ones which are commonly used by conference leaders. They

take all sorts of special forms and are carried out through the use of all sorts of devices. Relative values of the different formulas would evidently depend upon the working conditions, the characteristics of the group, and the particular subject under discussion."

The first or thinking step formula is the one the author referred to above as the pulling out of lists of facts or data and evaluating them.

The second formula is one that has been used since the early days of foremen conferences, being elaborately described in Federal Board Bulletin 36 (1920) where many pages were devoted to it.

The third type of formula as described above is the type that the author of this study believes to have but lately come into prominence in the work. Experience with it and observation of the use of it by others convinces us of its great value.

Klinefelter (1927, Page 59) gives us the Standard Formulae and variations as follows

1. Standard Formulae.

    a. Error - Causes - Remedy (Tukey).

    b. Cause - Responsibility - Effect - Ways. and Means (Allen).

2. Variations of Formulae.

 a. Cause - Responsible - Remedy.

 b. What's wrong - Who is to blame - What's to be done.

 c. Elements breaking down - Who's to blame - What's liable to happen - What can be done about it.

 d. Evidence, or lack of - What or who is to blame - Possible effect - What is the remedy

 e. Situation - Possible effect - What to do about it.

 f. What is wrong - Cause - Ways and means.

 g. Evidence of - Situation - Cause - Effect - Ways and Means.

 h. Situation - What to do - Positive effect - Negative effect - Remedy to head off re-occurrence."

In order to determine whether or not the second of these types of formulae were in general use, leaders were asked,* "Do you find that foremen are interested in classifying their responsibilities as to those of a manager and those of a supervisor?" The following chart summarizes:

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*Question 17; Questionnaire B; Appendix A.

the answers of 73 conference leaders:

CHART 20. FOREMEN'S INTEREST IN MANAGERIAL AND
SUPERVISORY RESPONSIBILITIES.

No. of Leaders	
35	Foremen are "interested."
19	Foremen are "not interested."
5	Do not attempt to classify responsibilities in this way.
11	Foremen show "little interest in it."
3	Foremen "interested sometimes."
73	

We may conclude from a study of the above chart that
while this is not a "sure fire" type of analysis to use,
it has an even chance of proving of interest to foremen.

The leaders were asked,* "Do you stimulate the dis-
cussion of the group best thru the discussion of lists
pulled out of the group or by the use of 'cause to effect'
formulas?" It was hoped that the answers to this question
would sample the interest in types one and three of the
Federal Board pattern of analysis. The replies are sum-
marized in the following chart:

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*Question 34; Questionnaire B; Appendix A.

CHART 21. LISTS VS. FORMULAE IN CONFERENCES.

No. of Leaders	Reply
36	Discussion of lists.
1	Lists generally.
13	Both.
1	No preference.
6	Cause to effect formulae.
1	No fixed method.
1	Don't know.
1	Each situation different.
3	Can't say, and depends.
63	

Not all of the 79 leaders answered the question. Of the 63 replies over half find the discussion of lists the most interesting. About one-fourth of the leaders replying find them of equal interest. Only six find the cause to effect method the most interesting.

It is a question with the author of this study whether or not a considerable proportion of the leaders were sufficiently familiar with the cause to effect method to use it. This is based on the replies to the following question,* "Which of these formulas (cause to effect) do

*Question 35; Questionnaire B; Appendix A.

you find most effective?"

Only **five of the** 19 who attempted to answer this question indicated by their answers a knowledge of just what was meant by the cause to effect formula or indicated that they used them in conference.

Having observed the interest that foremen take in the use of these cause to effect formulas, the author believes their use should be more general and that leaders would with greater experience in their use, report greater interest.

D. <u>Conference Topics</u>.

1. <u>Classes of topics found most interesting to foremen</u>.

Conference topics naturally classify themselves as follows:

      a. Handling men.

      b. Handling equipment.

      c. Handling material.

Leaders were asked as to the order of greatest interest of these three classes of topics.* Their answers are summarized in the following chart:

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*Question 16; Questionnaire B; Appendix A.

CHART 22. RATING BY CONFERENCE LEADERS ON GROUP
INTEREST IN MEN, EQUIPMENT AND MATERIAL
PROBLEMS.

Interest Rating	Men	Equipment	Materials
First ---------------	61 Leaders	2 Leaders	3 Leaders
Second ---------------	1 "	33 "	28 "
Third ---------------	3 "	28 "	32 "
All three equal -----	3 "	3 "	3 "
Equipment and Material equal ----------		2 "	2 "
	68	68	68

It is evident from the above chart that most leaders
find the problems of handling men to have the greatest
interest. Materials and equipment are of about equal
interest value for second place.

2. Topics of Common Interest. Cushman (1927, Page 138-
9), gives us a list of conference topics "intended to in-
dicate the kind of topics which can profitably be handled
by conference method." With this list in mind conference
leaders were asked,* "In a series of ten meetings what are
the topics you have found foremen most interested in dis-
cussing?" As might be expected with 70 leaders contri-

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*Question 18; Questionnaire B; Appendix A.

buting, a great variety of topics were suggested -- 94 in
all. The replies in part are tabulated in the following
chart and compared with the list furnished by Cushman:

CHART 23. TOPICS OF COMMON INTEREST TO FOREMAN GROUPS.

No. in Cushman	Topics Listed by Cushman	No. of Leaders
1	Supervisory Responsibilities, Analysis Of.	31
2	Handling of Written Orders.	29
3	Verbal Orders Directions and Suggestions.	
4	Records and Reports.	11
5	Departmental Job Analysis.	19
6	Plant Organization Relationship.	--
7	Interest in the Job.	25
8	Dissatisfaction and Labor Turnover.	27
9	Distribution of Supervision.	--
10	Safety and Accident Prevention.	40
11	Carelessness on the Job.	16
12	Leadership.	25
13	Production Difficulties.	12
14	Handling Green Men.	10
15	Foreman as Instructor.	33
16	Apprentice Training.	--

(chart 23 continued)

| 17 | Cooperation. | 46 |
| 18 | Case Analysis. | -- |

Cooperation had the highest frequency of mention with 46. Most of the topics mentioned by Cushman have been found by leaders to be of interest to foreman groups. It is interesting to note that case analysis was not mentioned at all by leaders. This is also the case with plant organization and distribution of supervision.

In the following chart we list the eighteen topics mentioned by leaders having the highest frequency:

CHART 24. TOPICS HAVING HIGHEST FREQUENCY AS TO
INTEREST.

Order		Frequency of Mention
1*	Cooperation	46
2*	Safety and Accident Prevention.	40
3*	Instructing Men.	33
4*	Foreman's Job and Responsibilities.	30
5*	Orders, Directions and Suggestions.	29
6*	Interest Factors.	25
7*	Leading Men.	25
8*	Departmental and Job Analysis.	19
9*	Labor Turnover.	19
10*	Carelessness.	16
11	Morale.	15
12	Discipline.	13
13	Handling material.	13
14*	Production Difficulties.	12
15	Supervision.	11
16*	Reports and Records.	11
17	Care of Machinery.	10
18*	Hiring and Firing.	10

*Included in Cushman list. See Chart 23.

It should be noted that each of the eighteen topics were mentioned at least ten times. Also, that all but four of them were mentioned specifically in Cushman's list. No doubt the other four are included in his list of topics. It is evident therefore, that the leaders in use of topics run pretty close to the Federal Board pattern.

3. The First Topics in a Conference. "One way of starting a first conference with a new group of foremen" according to Klinefelter (1927, Page 11)----------"is for the leader to develop from the group a partial list of responsibilities or duties which they recognize they are hired by the company to discharge."

The Federal Board reports (Bulletin 1927, 125:100) having made a study of twenty-two conference reports with reference to first topics discussed. The following chart is reproduced from this report:

CHART 25. FREQUENCY OF OCCURRENCE OF FIRST TOPICS
ON 22 CONFERENCE REPORTS.

Topic No.	Topic	No. of Occurrences.
1	Analysis of Responsibilities.	11
2	Duties of a Foreman.	3
3	The Foreman's Responsibilities.	2
4	Carelessness.	2
5	The Workman's Job and the Foreman's Job.	2
6	The Foreman's Place in Industry.	1
7	Supervisory and Managerial Responsibilities.	1

Since topics numbered 1, 2 and 3 are along the line indicated by Klinefelter it is seen that they follow fairly closely with his recommendation.

4. Safe Topics for Conferences. Sanders (1926, Page 84) in discussing topics with which to open conferences gave a demonstration in which he pulled out a list of twenty-three foreman's responsibilities. Later in his report of the conference with leaders in training (page 125) he gave a list of safe topics to start out upon as follows:

CHART 26. SAFE TOPICS TO START ON AND TOPICS FOR
LATER DISCUSSION.

Those Safe to Start On	Those to Take Up Later
1. Topics which bring out pride in their work.	1. Topics which place the conference leader in the position of criticizing the plant organization.
2. Inspection of product.	
3. Questions dealing with the relation of the foreman to his men.	2. Questions involving inter-departmental relationships.
4. Giving Orders.	3. Effect of bad work in one department on another.
5. Carelessness.	
6. Cutting down labor turnover.	
7. Keeping men contented.	
8. Safety first conditions.	
9. Upkeep of equipment.	
10. Planning work.	
11. Cooperation.	
12. Ordering supplies.	
13. Interest.	
14. Leadership.	

The importance of the selection of the first few
topics is emphasized by Klinefelter (1927, Page 13) when
he said, "It should be recognized clearly that the con-

ference leader is up against a rather difficult proposition
in starting a conference under any circumstances and that
he is under some suspicion at the beginning regardless of
whatever method he chooses to open with. He will natural-
ly avoid setting up any disadvantages----------whenever
possible----------. He cannot afford to have the suspicion
raised that he is simply running a group for putting over
propaganda of some sort----------."

5. Danger Topics. According to the Federal Board
(Bulletin 1927, 125:86) "Certain situations come up which,
if allowed to develop at that time or sometimes if al-
lowed to develop at all will produce undesirable situa-
tions. The following type situations or description of
danger topics is reproduced from this report:

CHART 27. POTENTIALLY DANGEROUS TYPE SITUATIONS.

1. "Panning" the management.

2. "Panning" company policies.

3. Making comparisons discreditable to the organization.

4. The uncovering of actual bad situations or processes.

5. The matter of the "closed" versus the "open shop."

6. Personalities between group members.

7. Personal criticisms directed at "higher ups."

8. Antagonistic groups within the organization.

(Chart 27 continued)

9. Privileges to certain classes of workers.

10. Inaugurating new practices.

11. Antagonized individuals utilizing the conference to "dig" at each other.

12. A comparison of the value of different individuals in the organization to the organization.

13. Questioning the value of a special department.

14. Situations where one member of the group is trying to "frame" another member.

15. Where one member of the group is very unpopular with the other members of the group, and the other members of the group "have it in for him" and "take a crack" at him whenever they can.

————————————————————

Klinefelter (1927, Page 48) states, "There are certain topics which are unsatisfactory and sometimes dangerous for a leader to discuss. Such topics as 'efficient foremen' and 'plant efficiency' come under this class.

With the above as our pattern it is of interest to discover the feeling of conference leaders concerning danger topics. Leaders were asked,* "Are there 'so-called' danger topics which you do not care to have groups handle?" The following chart summarizes the answers received:

————————————————————

*Question 19; Questionnaire B; Appendix A.

CHART 28. EXISTENCE OF DANGER TOPICS.

No. of Leaders	Reply
47	Recognize there are danger topics.
3	Depends on circumstances.
26	Do not recognize any topics as dangerous.
76	Total Reporting.

About one-third of the leaders reporting do not recognize any topic as dangerous. This is rather surprising. One leader reported "leader should be able to cope with any situation." This would seem to be an ideal thing for leaders to strive for. It is reassuring that on such a disputed point about two-thirds of those replying are in agreement with the safe and sane policy as set up by the Federal Board.

The leaders were asked* to list danger topics. Forty-seven leaders in reply furnished the list which has been arranged in the following chart:

*Question 20; Questionniare B; Appendix A.

CHART 29. DANGER TOPICS.

No. of Times Mentioned.	
19	Wages and wage plans.
16	Company policies.
15	Union and open shop questions.
9	Criticism of management.
5	Criticism of other departments.
4	Policies not under control of foremen.
3	Religion.
3	Policies.

Fifteen other topics were each mentioned once.
Politics and religion, of course, are not proper subjects
for discussion in a foreman conference for they are not a
part of a foreman's responsibilities. More leaders un-
doubtedly would have mentioned "Policies not under the con-
trol of foremen" if they had not, early in their experience,
accepted their exclusion as a fundamental principle.

It is evident from a study of the foregoing list that
there are danger topics which must be reckoned with
whether or not leaders are willing to recognize the danger
involved. A recognition of such topics as dangerous will
cut down the hazards of conducting conferences.

Klinefelter (1927, Page 11) in discussing danger topics said, "They will often times arise spontaneously from the group and the leader must decide whether to side-step discussing such a topic or whether it is best to take 'the bull by the horns' and handle it. Listing out the relative advantages and disadvantages is often a good device to use------that no friction will result."

6. <u>Topics From Negative Angle</u>. "Taking up the negative side first-------is a little trick which makes use of a well known psychological principle," according to Klinefelter (1927, Page 18), "since it is usually very much easier for a person to recognize something that is wrong than to see something that is right. Hence, many topics can be developed by taking up the negative side first and afterwards working out the opposite to get the positive."

To learn how general was this practice among leaders they were asked,* "Do you approach some topics from the negative angle?" The following chart gives the replies:

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*Question 29; Questionnaire B; Appendix A.

CHART 30. PRESENTATION OF TOPICS FROM NEGATIVE
ANGLE.

No. of Leaders	Reply
36	Yes.
13	Sometimes.
2	Very often.
3	Seldom.
1	Usually not.
16	No.
1	Of doubtful value.
72	

While here again there is a difference of opinion on
use of method, 51 out of 72 report that they present topics
from the negative angle.

When asked to list topics presented from negative
angle* the answers of leaders formed the basis for the
following chart:

*Question 30; Questionnaire B; Appendix A.

CHART 31. TOPICS BEST APPROACHED FROM NEGATIVE ANGLE.

No. of Leaders	Topics
9	Cooperation.
8	Orders going wrong.
6	Teaching.
5	Men dissatisfied.
5	Accidents and safety work.
3	Leadership.
3	Interest.
2	Breaking in green help.
2	Personnel problems.
2	Carelessness.
2	Foreman's responsibilities.
2	Handling men.
2	Losses and waste.
2	Loyalty.

Sixteen other topics were each mentioned once by leaders. It will be seen by a study of the above list that there are a number of topics which experienced leaders have found to be effective when taken up from the negative angle.

7. <u>Carrying over Topics</u>. Klinefelter (1927, Page 50) when discussing the discontinuous series of conferences said, "one of the disadvantages---------is that something must be chosen as a topic which can be completed in the two hour session. It is a great waste of time and effort to have to continue a topic from one session to another and revive interest and remembrance of discussion."

When asked upon this point* leaders gave the following replies:

CHART 32. CARRYING OVER TOPICS.

No. of Leaders	Replies
45	No trouble.
2	Very seldom.
1	No trouble with daily sessions.
2	Don't try it often.
1	Best approach it again.
21	Yes.
72	

It seems to be the experience of leaders that this is not a difficult thing to do.

8. <u>Advance Announcement of Topics</u>. Klinefelter (1927,

*Question 31; Questionnaire B; Appendix A.

Page 53), in answer to a question of a leader in training stated, "The primary difficulty in announcing the topic (in advance) is that it makes it seem a little more of a cut and dried performance."

Leaders were asked the question,* "Do you make it a practice to announce the topic you have selected for the next meeting?" The replies are summarized as follows:

CHART 33. ADVANCE ANNOUNCEMENT OF
TOPICS BY LEADERS.

No. of Leaders	Replies
29	Yes.
1	Yes, if I am sure what it will be.
1	They know the topic from previous line-up of topics.
1	Depends on close of present meeting.
1	Yes, they select it.
13	Sometimes.
3	Usually.
1	Generally no.
24	No.
74	

It is evident from the above that more than half the

*Question 27; Questionnaire B; Appendix A.

seventy-four leaders who replied announce topics in advance at least part of the time.

E.   Special Operating Points.

1. Introduction of Auxiliary Information and Written Material. Cushman (1927, Page 25) in discussion of this point, says, "The question of the use of auxiliary material is one regarding which there is a wide difference of opinion. On the one hand the use of printed text material is advocated, while on the other hand successful conference work is being done without the use of any auxiliary material aside from reports of meetings or conferences held."

The Federal Board (Bulletin 1927, 125:47) gives an indication of the additional information actually needed in a conference at Bridgeport, Connecticut, and shows how the material was secured. The chart which follows is reproduced from this bulletin:

CHART 34. SITUATIONS WHERE ADDITIONAL INFORMA-
TION MAY BE REQUIRED.

Some Situations	Straight Thinking	Information	What information	Information, How furnished.
1. Does not know place in organization.	Yes	Yes	Organization Chart.	By management.
2. Knowledge of department costs.	Yes	Yes	Actual costs.	By cost department man.
3. Fails to cooperate fully (inter-departmental)	Yes	No	None	By group members.
4. Plays favorites.	Yes	No	None	By group members if anybody.
5. Friendships outside of work hours.	Yes	No	None	Through group discussion if anywhere.
6. Jealousy.	Yes	No	None	As above.
7. Talking shop at home.	Yes	No	None	" "
8. Works for himself rather than company.	Yes	No	None	" "
9. Cost of firing men.	Yes	Yes	Actual figures if possible.	By accounting department.

(Chart 34 continued)

10.Fire haz-ard re-duction.	Yes	Yes	Some cost figures.	Insurance company reports.
11.Spotting incipient disease.	Yes	Yes	Small amount of medical information.	By plant doctor.
12.Accident cases first aid.	Yes	Yes	Few suggestions.	" "
13.Prevention of infection.	Yes	Yes	" "	" "
14.Knowledge of material.	Yes	Very little	Special materials.	Outsider.
15.Replacement of equipment.	Yes	Yes	Depreciation policy of company.	Plant accountant.

It will be noted that the information needed in each case was secured from other departments without resorting to reading or outside study.

Leaders were asked,* "If you select topics in advance for conference discussion do you hand out previously prepared information?" The answers are summarized in the

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*Question 22; Questionnaire B; Appendix A.

following chart:

CHART 35. HANDING OUT PREVIOUSLY PREPARED INFORMATION.

No. of Leaders	Replies
50	Do not do so.
1	Do not, but it has advantages.
2	Hand out cases and questions.
8	Sometimes do so.
11	Do so.
72	

The great majority of leaders therefore do not depend on such auxiliary material for the success of their conferences.

"The Conference", according to Cushman (1927, Page 5), "consists of a systematic, though somewhat informal thinking through of problems by a group of experienced persons. The experience of the group members is the principal and most important element involved in the work of the conference group. The experience of group members which is related to the problems or questions presented for group consideration form the basis for discussion."

Leaders were asked,* "How much information which is

*Question 26; Questionnaire B; Appendix A.

new to the group (such as efficiency methods and modern production methods) do you feel can be successfully introduced by a conference leader without hurting the success of his conference?" The replies are summarized below:

CHART 36. AMOUNT OF NEW INFORMATION PRESENTED
BY LEADER.

No. of Leaders.	Replies
9	None.
18	Very little.
14	Much.
5	Depends on leader's ability.
12	Depends upon group.
1	One-third of time.
1	10% of time.
1	10 - 15% of time.
61	Total

All but nine of sixty-one leaders recommend a program whereby some amount of extra material is introduced by the leader. This depends upon the ability of the leader or upon the group. Fifty-two out of sixty-one replies therefore, favor a conference which is not a pure conference which deals entirely with information within the experience

CHART 37. LEADER'S OPINIONS ON INTRODUCTION OF
INFORMATION BY LEADERS INTO CONFERENCES.

Frequency of Reply	Opinion for Introduction	Frequency of Reply	Opinion Against Introduction
1	Much if carefully presented.	1	None. It is danger-ous and is outside the conference leader's job.
1	Depends on the group They usually want new stuff.	4	Very little.
1	Just as much as one has time to handle.	1	Dangerous to do this because lead-er is usually not capable.
1	Depends upon his ability and how good he goes over with the group.	1	I do not regard a conference leader as an efficiency expert--hence very little.
1	Not too much at a time but quite a lot can be brought up and interest will be stimulated by it.	1	Very little unless leader resorts to the lecture method which defeats the purpose of the con-ference.
1	About one-third of the time can be so spent.		
1	About 10% of the time.	1	Conference not pri-marily for this purpose.
1	A considerable a-mount incidentally.	1	Information on new methods should be obtained from the group. Much if so based.
1	This can be done by leader citing cases and he must judge how many.		
1	Until interest lags.		Discuss only as brought up by mem-bers of group and then briefly.

(Chart 37 continued)

1	No limit to such information as long as it is introduced at the right time.	1	Little or none during first series. After several series of conferences, may be ready to take up.
1	Experienced leaders will introduce a great deal.	1	Has no place in such a conference. It should be presented as a totally different course
1	There is no limit if he does it by the case method.		
1	A considerable amount if properly handled.	1	Not a great deal. The purpose of a conference is to develop the habit of organized thinking or analysis of common problems.
1	As much as you like. My groups always were interested in learning about anything new.		
		1	Men must be familiar with the subject or there can be no real discussion.
1	All that is known to be sane and tried.		

2. **Outside Reading Required of Foremen.** This topic is related to the previous one. Leaders were asked,* "Do you require foremen to do outside reading?" The replies are summarized as follows:

*Question 24; Questionnaire B; Appendix A.

CHART 38. REQUIRING FOREMEN TO DO OUTSIDE
READING.

No. of Leaders	Replies
51	Do not.
5	Not much or not usually.
2	Occasionally.
1	Not outside of lesson material.
12	Suggest or encourage.
5	Yes, I do.
76	

Here again there is some difference in method with the
greater majority of leaders not requiring such work. If we
can realize that foremen vary in education from high a-
bility to read and absorb, as in the case of foremen in
printing establishments and operating departments of the
telephone companies, to low abilities in this direction, as
in the case of foremen in cement plants, we can see that
while outside reading could be required of some foremen with
success, in other cases it would prove to be a flat failure.

3. Paper Work. Mr. I. R. Anderson, Conference Leader
has told the author of this study of the paper work which
was required of foremen in connection with the early con-

ferences, He also has stated that the requirement of out-
side reports and rating of responsibilities diminished
rapidly as the value of other conference devices was
realized.

Sanders (1926, Page 121) mentions the matter and gives
the following chart which resulted from the discussion of a
group at Blue Ridge concerning rating and writing:

CHART 39. SHOULD FOREMEN BE ASKED TO WRITE?

Yes	No
1. Quiets the group.	1. Causes loss of interest.
2. Causes individual thought, effort and development.	2. Smacks too much of school methods.
3. Arouses interest.	3. May embarrass some who cannot write.
4. Makes it easy to change direction of discussion.	4. Takes up too much time.
5. Device to break up undesirable discussion.	
6. Sometimes desirable to get individual's ideas. Men may hesitate to express opinions orally but don't mind writing them.	

Here again we find a considerable difference of opin-
ion due perhaps to one group of leader's experience with
one type of foremen and the others experience with a

different type.

Dr. C. A. Prosser related to the author of this study his experiences in conducting foreman conferences in 1927-8 in Minneapolis. He required considerable paper work and reports that he got fine results. He had a group of foremen from the printing trades however, a high type of foreman. Realizing this fact he is planning on conducting a similar series of conferences in 1928-9 with a group of foundry foremen. Whether or not he can require paper work of the new group remains to be seen.

The Federal Board (Bulletin 1927, 125:53) in commenting on the value of paper work states, "Taken as a group, foremen are not favorably impressed under normal conditions with anything which calls for putting pencil to paper. It is considered good practice whenever material of this kind is put in the hands of the foremen to work material out on the blackboard and to use paper material more as a follow-up, than anything else. Experience has indicated, however, that under normal conditions----------paper material is not very useful except in exceptional cases."

In order to learn to what extent paper work is used by leaders today, the question,* "Do you require foremen

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*Question 25; Questionnaire B; Appendix A.

to do any paper work?" was asked. The replies are sum-

marized as follows:

CHART 40. REQUIRING FOREMEN TO DO PAPER WORK.

No. of Leaders	
34	No.
1	Only if they suggest it themselves.
1	I encourage them to do so.
1	Usually once and not more than twice.
21	Sometimes or very little.
1	Yes, whenever possible.
15	Yes.

It is evident from the replies that not much use is

made of this device and the Federal Board Pattern is pretty

closely followed.

4. Reports Daily to the Men. Cushman (1927, Page 26)

in reference to reports says, "Experience has indicated

very strongly that reports of meetings serve a worthy pur-

pose. The time and expense involved in preparing a re-

port of each conference session is amply justified by the

effect which such procedure has upon the group. ----------

the best plan is to prepare a summary of each session or

meeting so as to have mimeographed copies ready for dis-

tribution to the men at the succeeding session."

Sanders (1926, Page 117) advises, "Have stenographic
and mimeograph service available so the daily meeting re-
ports can be quickly compiled for distribution to the
group members before the next meeting."

In order to learn how general was the custom of fur-
nishing a daily report to the men, leaders were asked,[*]
"Do you furnish the men with daily reports of the session?"
We find from answers submitted that 30 leaders furnish
such a report while 32 do not.

5. Reports to the Management. "It is of the utmost
importance", according to Sanders (1926, Page 118) "that
the management be kept informed of the work and the pro-
gress of the meeting. ----------keep them accurately in-
formed of the progress made and topics discussed so that
they can criticize your efforts as well as make suggestions
----------------. -----------they can more intelligently
cooperate with you and with the group members."

In order to check up on leaders as to their practice
in this respect, they were asked,[**] "Do you furnish the
management with copies of the reports of each day's
sessions?" The replies are summarized as follows:

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[*]Question 12; Questionnaire B; Appendix A.
[**]Question 11; Questionnaire B; Appendix A.

CHART 41. FURNISHING MANAGEMENT WITH DAILY
REPORT.

No. of Leaders	Replies
32	Do not do so.
27	Furnish a report.
7	Sometimes do so or on request of management or men.
1	Have not done so, but should.
3	Have a more or less organized "course" which "they follow" and which is placed in the hands of the management.
1	Not always but should.

Here again we find leaders about equally divided in method. In two cases a leader reports furnishing the management a report and not furnishing one to the men.

6. Submitting Final Reports. Sanders (1926, Page 127) gives us the following points concerning final conference reports:

The Value of Having a Conference Report.

a. Serves as a means of recall to the conference member's minds the things which are considered in the conference.

b. Inspires interest in the work.

c. Serves as a review of the work.

d. May carry desirable messages to other foremen and instill in them a desire to attend.

e. Informs the management of the progress and accomplishments of the group.

f. Inspires respect for the work.

g. Serves as a guide to the conference leader for improvement in future meetings.

h. If printed, the report carries more weight, -----.

Leaders were asked relative to submitting final reports of conferences.* In replies received we find 46 leaders submit complete reports while 21 do not do so. Others stated that they sometimes submitted reports. A few stated that while they did not do so, that it should be done. It is evident that twice as many submit reports as do not which shows a fair agreement with the Federal Board Pattern.

7. <u>Keeping Foremen's Names Hidden In Reports</u>. Klinefelter (1927, Page 47) reports as the result of his experience, "Occasionally the management will ask the leader to give the name of the employee who has introduced an idea or topic. ---------The leader who would furnish this information to the management will very quickly destroy his

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*Question 13; Questionnaire B; Appendix A.

usefulness as a conference leader."

With this advice in mind we asked leaders the question,* "Do you keep names and other means of identification out of your reports of discussion?" The replies are summarized in the following chart:

CHART 42. POLICY OF KEEPING FOREMEN'S NAMES
OUT OF REPORTS.

No. of Leaders	
49	Yes, I keep them out.
1	As far as possible, I keep them out.
3	Generally leave them out.
1	Not always.
1	Depends.
5	No, I put them in.

Here again most leaders are in agreement with the experience of the Federal Board in the matter.

F. Other Uses For Conference Method.

1. Use of Conference Method with Adolescents. "Recent experience," according to Prosser and Allen (1925, Page 207) "has indicated that the conference can also find an important place in the work of the vocational school for

adolescents. The conference, of course will only work where the members of the group have experiences in sufficient amount to form a large basis for the organization and discussion of facts and ideas.

It has been found, particularly in the continuation schools, that employed young people have a far greater mass of experiences than the regular school has assumed. The possibility of drawing on these experiences for conference work has been demonstrated to be considerable. --------The conference is simply a device for utilizing all these experiences as thinking stuff for the training of adolescents."

"It should be pointed out," according to these authors (Page 359) "that the primary aim of the conference is not the conclusion reached, although this will doubtless be sound and have undoubted social value. The main purpose and the greatest value lies in the practicing of youth to think with the use of pertinent facts which they have helped to secure and with the use of correct thinking procedures."

2. Use of Conference Method in Teacher Training. Cushman (1927, Page 186) upon this topic says, "Experience has clearly demonstrated the value of the conference procedure in dealing with experienced vocational teachers and super-

visors for the purpose of securing improved procedure on the job."

In order to learn to what extent this method is being used by the states in teacher training work, and other forms of training, state supervisors were asked,* "What other uses do you have for the conference method other than in foreman conferences?" and "Have you found the conference method successful in connection with vocational teacher training work?" The replies to these questions are summarized in the following chart:

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*Questions 13 and 14; Questionnaire A; Appendix A.

CHART 43. USES FOR CONFERENCE METHODS REPORT-
ED BY STATE SUPERVISORS.

No. of Supervisors	Uses for Method.
22	Teacher training (Institutional and in service).
8	Teacher's meetings.
3	Meetings to plan instruction.
3	Meetings with local directors.
1	Round tables at vocational conferences.
1	Interesting large companies in vocational education.
1	Group meetings of company officials.
1	Departmental conferences.
1	Principal's conferences.
1	Conducting institutional surveys.
1	Meetings of apprentice commission.
1	Adult classes in agriculture, home-making and industrial subjects.
1	State advisory committees.
1	Most any group discussion.

The most effective comment on the above table is

quoted from Wright and Allen (1926, Page 275-6):

"The supervisor will find the conference particularly

valuable because of two reasons. In the first place a good

supervisor never tells people officially that they are doing a poor job. In other words, he normally avoids setting up the recognized relation that exists between an instructor and learner. In the second place the kind of education which he must carry on does not involve the giving of additional information or the teaching of people how to do something that they could not do before, to anywhere near the degree that it does involve assisting them to think more clearly, to think more deeply, and, in addition, to get their thinking organized. ----------where the proper technique is used and where the conference leader is personally qualified, the conference is probably the most effective agency that a supervisor can use in his educational work."

The truth of the foregoing quotation was illustrated in an experience of the author of this study.

In 1927 he had occasion to meet with negro trade teachers to help them do a better piece of teaching. A long list of difficulties was developed from the group by conference methods.

Each difficulty was in turn discussed and analyzed by use of an appropriate formula. This resulted in these teachers discovering _for themselves_, as they thought their problems through, that they were at least in part respon-

sible in each case for the difficulties of which they complained.

One supervisor reporting on this subject cautions that the use of this method "can be run into the ground." Another considers it "a good tonic for teachers when interest in teacher training lags."

3. Use of Conference Method in Seminar. "It is also interesting to note," according to Wright and Allen (1926, Page 276) "that in our modern educational programs, the seminar in the graduate school is the only representation of a typical conference. It is at least a curious fact that one of the most thought-developing procedures known to educational practices only appears at the present time in the higher grades of advanced graduate work."

Conference leaders were asked* as to their use of the conference method with other than foremen. Sixty-one reported having done so. It is to be regretted that the data on the type of groups was not secured.

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*Question 36; Questionnaire B; Appendix A.

G. Comparison Of Conference Methods With The Laws Of Learning.

The conference method was compared in Part I of this study with other instructional processes. A further discussion of this method and a comparison with the Laws of Learning as accepted today by psychologists has been deferred until this time. After having discussed the Federal Board pattern of the conference we are better acquainted with it and better prepared to make comparisons.

The author of this study is indebted to Dr. Prosser for the following chart which was the outcome of notes taken while in conference with Dr. Prosser upon this subject:

CHART 44. HABIT PSYCHOLOGY APPLIED TO LEARNING METHODS.

Notes from a talk with Dr. Prosser on Habit Psychology.	Foreman conference in agreement or disagreement.	Lecture Method in agreement or disagreement.	Class Room Method using text book material in agreement or disagreement.
There are three kinds of habits; (1) Manipulative; (2)Thought; (3) Attitude.	The conference concerns itself with building (2) and (3).	Can only attempt (2) and (3).	Might attempt all three.
There is no building of habits without participation.	Foreman participates in thinking of group as problems are discussed.	Foreman is a listener who may ask questions at the most. Gets little experience thinking problems thru.	Foreman recites on text material which he may have little chance to apply. He memorizes more than he pools experience.
We think only as we tackle problems.	Foreman tackles real every-day plant problems. Chance for self expression.	Lecture may or may not include the foreman's actual problems. Foreman is there to listen. No real encouragement to think.	Text books must appeal to greatest possible number. Cases apply to anyone trade or industry. Many cases seem unreal.
We fix habits only as we tie them in with past or current experiences.	Past and current experiences made the basis of discussion.	Usually does not include past or current experiences of listeners. Opportunity for thinking level above pooled experience.	Text book cases are not foreman's past or current experiences altho they may suggest them.

(Chart 44 continued)

Generalized principles are obtained by pooled experience	Under trained leader foremen are lead to see principles fundamental in experiences as pooled.	Lecture includes principles with applications or illustrations foreign to the experience of listeners.	Text book presents principles and illustrates them with cases from a variety of industries.
No thinking without use of words.	In conference foremen all speak the same language, using trade terms.	Lecturer's vocabulary often includes words not common to or known by foremen.	Text books may or may not be in the language of the industry from which foremen come. Usually written for foremen of many industries.
No habit built without interest.	Unless a topic holds interest of group it is not discussed.	Lecture is given even if only a few are interested. Lecturer cannot adapt lecture to fit.	There is a feeling that assignments in the text must be covered.
Practice in a new habit of thought or action takes the place of an old habit.	He practices analizing his problems and therefore commences to think for himself.	He listens to another discuss principles of foremanship and does little thinking.	He practices recitation from a book which does not build the habit of thinking problems through.

A study of the foregoing chart shows that the conference method is closely in accord with the laws of Habit Psychology as expressed by Dr. Prosser. It should prove a highly efficient learning device therefore when used by an experienced leader.

In the following chart we match up for comparison, Cushman's (1927, Page 6) "Steps in Conference Procedure" with Schmidt (1928 Manuscript) "Steps in Constructive Thinking":

CHART 45. CONFERENCE STEPS COMPARED WITH
STEPS IN CONSTRUCTIVE THINKING.

No.	Steps in Conference Procedure.	No.	Steps in Constructive Thinking.
1	The assembling of data or facts concerning a problem or question. (a) From first-hand experience. (b) From second-hand experience (the experience of others).	1	Clearly and definitely stating the decision or decisions which need to be made.
2	Selection of data or facts which are pertinent to the problem or question under discussion.	2	Locating or identifying the factors influencing or conditioning the decision or decisions.
3	The evaluation of the functioning facts or data.	3	Determining the kind of information needed to weigh the factors.
4	The making of a decision based upon the functioning facts.	4	Getting the information that is needed to weigh the factors.
5	The formulation of a plan to carry out the decision.	5	Weighing or evaluating the factors.
6	The execution of the plan.	6	Making the final decision (it is the formulation of a plan of action.)
		7	Executing and testing the plan.

Here again we find such complete agreement that we may conclude that a conference faithfully carried through the six steps will result in constructive thinking on the part of conference members. We may be assured then that the conference method when rightly directed, is an efficient instructional method.

PART III.

GROWTH AND PROMOTION.

A. Extent of Use of Conference Method in The
Training of Foremen.

After having found the conference method an efficient
learning device our next interest would be to learn just
how widespread is its use and what has been accomplished
during the six years of its use.

1. Agencies for Conducting Conferences. State super-
visors were asked,* "Does your department conduct foreman
conferences in the industries of your state," and "Do the
teacher training institutions in your state conduct fore-
man conferences?"

The replies are summarized in the following chart:

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*Questions 1 and 2; Questionnaire A; Appendix A.

CHART 46. AGENCIES FOR CONDUCTING FOREMAN
CONFERENCES BY STATES.

No. of States	Method of Conducting Conferences
17	State Board conducts conferences.
4	Teacher training institutions do this.
10	Both State Boards and Teacher Training Institutions.
1	Engineering Division of College does this.
10	No conferences conducted.
2	Formerly conducted; now abandoned.
44	

A study of this chart shows that 34 states in some way have furnished this service. Two, however, have for some reason abandoned the work. Ten states have a dual agency for conducting this work.

2. Conference Work Independent of State Aid. State supervisors were then asked,* "What industries in your state are conducting foreman conferences by means of leaders trained independently of your service?" The replies are summarized in the chart following:

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*Question 12; Questionnaire A; Appendix A.

CHART 47. CONCERNS CONDUCTING CONFERENCES WITH
LEADERS TRAINED INDEPENDENTLY OF
STATE SERVICE.

No. of States Reporting	No. of Companies in State	Total No. of Companies
2	5	10
2	4	8
1	3	3
6	2	12
7	1	7
18	15	40

Only 18 out of 44 state supervisors report this type
of work as conducted independently of their service. Only
a total of 40 companies reported. These totals are sur-
prisingly low, and may be due to one or more of the follow-
ing reasons:

a. State Board agencies are caring for the demand.

b. State Board not informed of extent of work done by
others.

c. State Board training all the leaders needed by
the industries of the state.

As we continue the study we may get the answers to
this problem.

3. <u>Number of Conference Leaders Employed by State</u>
<u>Agencies, Board and Teacher Training Institutions</u>. In order
to get another indication of extent of the work, state
supervisors were asked,* for the names of conference lead-
ers. The following chart summarizes the replies:

CHART 48. NUMBER OF LEADERS IN SERVICE.

No. of States Reporting	No. of Leaders at Work	Total No. of Leaders
1	9	9
1	8	8
1	7	7
1	6	6
1	5	5
2	4	8
7	3	21
6	2	12
12	1	12
32		88

A study of this chart shows that from one to three
leaders is the usual provision for caring for the demand.

4. <u>Length of Time the Service Has Been Offered by</u>
<u>the States</u>. In answer to the question,** "For how many

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*Question 3; Questionnaire A; Appendix A.
**Question 4; Questionnaire A; Appendix A.

years have you been offering this service to foremen?" We
received the replies which are made the basis of the
following chart:

CHART 49. LENGTH OF TIME FOREMAN CONFERENCE
SERVICE HAS BEEN OFFERED BY STATES.

No. of States Reporting	Number of Years
2	10
4	8
4	7
3	6
4	5
2	4
5	3
5	2
3	1

This chart has some interesting replies in it. It is
the belief of Allen and others that the conference method
has only been applied to foreman training for five or six
years as mentioned in the first part of this study. No
doubt the ten states reporting longer than six years were
giving some other form of foreman training. The natural
question in our minds is whether or not they still conduct
the same sort of conferences.

Eight of the states reporting show two years or less that they have furnished the service.

5. <u>Extent of Training Furnished</u>; State supervisors were asked* to estimate the extent of foreman conference work during each of the five years including 1928.

The following chart was compiled from the returns. States have been listed according to the number of workers engaged in manufacture according to the 1920 United States Census with the state having the largest number first, etc.:

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*Question; Questionnaire A; Appendix A.

CHART 50. ESTIMATE OF EXTENT OF CONFERENCE WORK WITH FOREMEN IN STATES.

States-order of importance in manufacturing.	1928		1927		1926		1925		1924	
	Groups	Foremen	Groups	Foremen	Groups	Foremen	Groups	Foremen	Groups	Foremen
1 New York*	-	-	-	-	-	-	-	-	-	-
2 Pennsylvania#	-	-	-	-	-	-	-	-	-	-
3 Ohio	116	3511	93	2890	36	1080	24	720	20	500
4 Massachusetts	-	-	-	-	-	-	-	-	-	-
5 Illinois	2	30	2	30	2	30	-	-	-	-
6 New Jersey	14	306	4	72	3	45	3	35	3	35
7 Michigan	2	65	1	25	-	-	-	-	-	-
8 Connecticut%	-	-	-	-	-	-	-	-	-	-
9 Indiana	40	775	46	1158	33	778	36	1056	37	1139
10 Wisconsin	4	66	1	14	-	-	1	18	-	-
11 California	-	-	19	305	-	-	1	24	-	-
12 Missouri	18	440	14	280	3	75	-	-	-	-
13 N. Carolina	12	350	11	235	3	75	1	35	-	-
14 Maryland	6	150	4	120	3	50	3	60	4	60
15 Rhode Island	-	-	-	-	-	-	-	-	-	-
16 Washington%	-	-	-	-	-	-	-	-	-	-
17 Georgia	3	80	2	30	12	300	15	400	20	600
18 Virginia	50	940	60	779	55	971	30	445	-	-
19 Minnesota	-	-	-	-	-	-	-	-	-	-
20 Texas	10	360	8	200	-	-	-	-	-	-
21 Alabama	6	147	5	121	4	105	4	98	3	79
22 Louisiana	6	179	4	140	3	79	-	-	-	-
23 Tennessee	2	50	-	-	2	37	1	24	2	16
24 Maine	-	-	-	-	1	-	-	-	-	-
25 N. Hampshire	-	-	-	-	-	-	-	-	-	-
26 West Virginia	2	39	2	79	5	187	-	-	-	-
27 Iowa	40	701	33	661	35	635	20	434	19	371
28 S.Carolina	-	-	-	-	-	-	-	-	-	-
29 Florida	2	30	1	18	-	-	-	-	-	-
30 Kentucky	1	12	2	26	-	-	4	67	-	-

(Chart 50 continued)

	1928 Groups	Foremen	1927 Groups	Foremen	1926 Groups	Foremen	1925 Groups	Foremen	1924 Groups	Foremen
31 Kansas	12	174	11	168	2	25	2	32	-	-
32 Oregon	5	125	5	125	-	-	-	-	-	-
33 Mississippi	-	-	-	-	-	-	-	-	-	-
34 Arkansas#	-	-	-	-	-	-	-	-	-	-
35 Nebraska	1	23	3	66	-	-	-	-	-	-
36 Colorado%	-	-	-	-	-	-	-	-	-	-
37 Vermont	-	-	-	-	-	-	-	-	-	-
38 Oklahoma	-	-	8	178	2	75	8	110	-	-
39 Delaware	-	-	-	-	-	-	-	-	-	-
40 Utah	2	19	2	24	-	-	-	-	5	60
41 Montana	1	18	1	21	-	-	1	16	-	-
42 Idaho	7	120	6	85	-	-	1	20	-	-
43 Arizona	-	-	6	114	9	147	5	112	8	93
44 Wyoming	-	-	1	30	1	15	-	-	-	-
45 S. Dakota	-	-	-	-	1	35	-	-	-	-
46 N. Mexico	4	50	3	45	3	51	2	32	-	-
47 N. Dakota	-	-	-	-	-	-	-	-	-	-
48 Nevada	3	25	2	15	1	10	1	8	-	-
Totals	371	8785	360	8054	219	4805	163	3736	121	3153

* Training of leaders is only activity.
# Not reporting; no estimate given.
% No reply to questionnaire.

A study of the figures in the foregoing table show that not all states are carrying on a program of foreman conference work commensurate with the numbers employed in manufactures.

Since the states are listed according to the number of workers in manufacture we should expect to find the largest foreman training programs at the first and gradually smaller programs on down the list. Such is not the case.

The totals show a steady gain over a five year period, the number of conferences having trebled and the number of foremen reached more than doubling.

6. Comparison of State Programs. In order to reduce these figures to some sort of comparable basis they have been rearranged in the following chart and use made of the number of workers in manufactures, in even thousands, reported in the 1920 United States Census:

CHART 51. COMPARISON OF STATE PROGRAMS OF
FOREMAN TRAINING.

Rank in Mfg. according to No. employed	State	Workers in Mfg. 1920 Census.	Total Foremen Trained in 5 year Period	Workers per Foreman attending Conferences.
1	New York	1,228,000	----*	----
2	Penna.	1,136,000	----%	----
3	Ohio	730,000	8701	84
4	Mass.	713,000	None	----
5	Illinois	653,000	90	7255
6	New Jersey	508,000	493	1030
7	Michigan	471,000	90	5233
8	Connecticut	292,000	----#	----
9	Indiana	272,000	5106	54
10	Wisconsin	263,000	98	268
11	California	243,000	329	738
12	Missouri	195,000	795	245
13	N. Carolina	157,000	695	226
14	Maryland	140,000	440	318
15	Rhode Island	139,000	None	----
16	Washington	132,000	----#	----
17	Georgia	123,000	1410	87
18	Virginia	119,000	3135	38
19	Minnesota	115,000	----%	----
20	Texas	107,000	560	191
21	Alabama	107,000	550	195
22	Louisiana	98,000	398	246
23	Tennessee	95,000	127	748
24	Maine	88,000	----%	----
25	New Hamp.	83,000	----%	----
26	W.Virginia	83,000	205	405
27	Iowa	80,000	2802	28
28	S.Carolina	79,000	None	----
29	Florida	74,000	48	1542
30	Kentucky	59,000	105	657

(Chart 51 continued)

Rank in Mfg. according to No. employed	State	Workers in Mfg. 1920 Census.	Total Foremen Trained in 5 year Period	Workers per Foreman attending Conferences.
31	Kansas	61,000	389	157
32	Oregon	58,000	250	232
33	Miss.	57,000	----%	----
34	Arkansas	49,000	----%	----
35	Nebraska	36,000	79	456
36	Colorado	35,000	----#	----
37	Vermont	33,000	----%	----
38	Oklahoma	29,000	363	80
39	Delaware	29,000	----%	----
40	Utah	18,000	103	174
41	Montana	17,000	55	309
42	Idaho	13,000	225	58
43	Dist.of Col.	10,000	----%	----
44	Arizona	8,000	466	17
45	Wyoming	6,000	45	133
46	S. Dakota	6,000	None	----
47	New Mexico	5,000	178	28
48	N. Dakota	4,000	----%	----
49	Nevada	3,000	58	52
				686 Average Workers per Foreman.

* New York trains leaders only.
% Not reporting, no estimate given.
# No reply to questionnaire.

Thirty-one states furnished estimates of the number of foremen trained during a five year period. The number of workers per foreman attending conferences during a five year period is a fairly good estimate of the measure of service to industry that foreman conference leaders have rendered during the five year period.

An inspection of Chart 51 shows the number of men per conference trained foreman varies from 17 in Arizona to 7255 in Illinois. The average is 622 workers which seems a high average when the merit of the method has been demonstrated over such a long period.

Three states having an industrial population totaling 937,000 have done nothing for foremen. It is regretted that we have no data on the remaining states which, together with the District of Columbia, have a total industrial population of 2,040,000. It is safe to assume that if they have done any foreman training work at all their reports would not improve the average figure of 686 workers per foreman attending conferences.

7. The Training of Leaders for Industry. It has been the contention of regional agents for the Federal Board for Vocational Education that the State Boards and the Teacher Training Institutions should aid industry in the problem of

foreman training by training leaders for industry. In no
other way is it possible for the great number of foremen
to be trained that should be trained through the conference
method. This is due to the facts that a state can usually
employ only a limited number of conference leaders, too few
to cover the industries of the state. Then, too, con-
ferences can and should be continued over several years.
For such service a local plant man should be trained.

The Federal Board (Bulletin 1927, 127:2) gives us a
splendid example of this sort from their experience.

"In September, 1927, a two-weeks' intensive training
course for conference leaders was conducted by a repre-
sentative of the Federal Board at a central point and at
the request of one of the States concerned. Seventeen
plants associated with a large industrial organization sent
men to this conference for training. Six months later a
report states that organized conference work is in success-
ful operation in the several plants of the company with
approximately 2,500 foremen enrolled. Had the Federal
Board representative who conducted the first two weeks'
course for conference leaders attempted to deal with this
problem directly through conducting foreman conferences in
the several plants, it would have been necessary, in order
to get an equivalent result, for him to have spent approxi-

mately three years conducting some 125 two-week conferences
with 20 foremen each at the individual plants.

New York State has adopted this policy and has trained
"more than 100 leaders for industry." The following letter
from Lewis A. Wilson to the author of this study, explains
this policy and their justification of it.

"The policies governing the development of an adequate
foreman conference program in New York State may be sum-
marized as follows:

1. Provide speakers for meetings of employers associ-
ations, chambers of commerce, superintendents or foremen
for the purpose of arousing interest in the development of
an adequate program of foreman improvement.

2. The training of conference leaders for the indus-
tries of the State. Courses for the training of foreman
conference leaders are conducted at various centers in the
State. These courses are attended by men and women sent
by the industries in order that they may become properly
trained to conduct foreman conferences in their plants.

3. The Department provides a follow-up service for the
men and women who are conducting conferences in the plants
of the State. This service is carried on through group
conferences and individual conferences. It also includes
assisting the conference leaders in determining the par-

ticular needs of their plants.

4. The establishment of foreman training classes in the evening schools of the State. These classes are organized primarily for the benefit of the foremen who are employed in small plants where it does not seem practical for the plant to conduct foreman conferences. The instructors selected for these classes are usually trained men who are conducting foreman conferences in the large industrial establishments.

I do not believe it is advisable for representatives of an educational institution or a State Department of Education to conduct foreman conferences in plants. A person responsible for foreman conferences must be familiar with company and management policy and interpret any questions in terms of the established policies."

In order to learn what the states were doing in this matter, state supervisors were asked,* "For what industries of your state have you trained leaders?" The following chart shows the extent of the activity of states in this respect according to replies received:

---

*Question 10; Questionnaire A; Appendix A.

CHART 52. CONFERENCE LEADERS TRAINED FOR INDUSTRY.

No. of States Reporting	Number of Leaders Trained	Total Number Trained
1	More than 100 (New York)	100
1	14	14
2	10	20
1	9	9
1	8	8
1	7	7
2	6	12
6	3	18
1	2	2
5	1	5
21		195

From the above figures it may be seen that little has
been done (except in the case of New York) toward the sup-
plying of industry with leaders. In view of the tremendous
field for conferences shown by Charts 50 and 51, there
should be greater activity by State Boards and Teacher
training Institutions along this line. Only 21 states re-
ported any activity, but 195 leaders reported trained and
100 of this number trained by one state. Only 20 leaders
report having trained leaders for industry.

8. <u>Conducting Additional Series of Conferences</u>. Leaders were asked,* "Do you make it a practice to return for additional series of conferences?" The replies are summarized in the following chart:

CHART 53. ACTION BY LEADERS ON REQUESTS FOR
ADDITIONAL SERIES OF CONFERENCES.

No. of Leaders	Reply
29	Yes, I return.
6	Return when I can.
1	Not always return.
1	Haven't had time to return.
1	Not returned as yet.
6	No, do not return.
44	

The above answers are additional arguments for the training of leaders for the industry so that leaders' time may be free to work with new groups.

9. <u>The Demand for More Conference Leaders</u>. In order to determine whether or not there is a demand for leaders, state supervisors were asked,# "Are there enough well trained conference leaders to satisfy the demand for their

---

*Question 42; Questionnaire B; Appendix A.
#Question 15; Questionnaire A; Appendix A.

services?" The replies are given in the following chart:

CHART 54. DEMAND FOR CONFERENCE LEADERS.

No. States Reporting	Report on Demand
15	Enough leaders now trained.
3	Not enough if we promoted conferences.
18	More leaders needed.
1	Demand small.
37	

The results as shown on the above chart are surprising. With such a small proportion of foremen receiving training, nearly half the state supervisors report enough now trained to supply the demand.

Two questionnaires were received from one state. The reply from the teacher training institution, which conducts all conferences in the state was, "Yes" (enough leaders); the reply from the state supervisor was, "No". It would seem as if the state supervisor realized there is a field for conference work as yet unknown to those responsible for furnishing the service to foremen.

Conference leaders do not agree with state supervisors in this matter. When asked*, "Do you believe there are

*Question 45; Questionnaire B; Appendix A.

enough well trained conference leaders available?" They gave the following replies which are summarized in the chart below:

CHART 55. ARE THERE ENOUGH WELL TRAINED LEADERS?

No. Leaders Reporting	
57	No.
2	Yes.
1	In some states yes, some no.
1	In this state, yes.
61	

10. <u>Advance Engagement of Conference Leader's Time</u>. As a further indication of the demand for foreman conferences, state supervisors were asked,* "How far in advance are you able to fill the time of conference leaders?"

With the exception of the following quotations the returns on this question were disappointing.

Virginia with two leaders reports "one year and nine months respectively."

Iowa with two part-time leaders reports, "one year, more work ahead than can be done."

"One year," reports Ohio.

---

*Question 7; Questionnaire A; Appendix A.

"As far ahead as we care to plan," (Texas).

Two states report two months in advance.

Three states have leaders scheduled one month in advance.

This makes only nine states with time of leaders engaged in advance. Either the leaders are used for other work, part time, or there is not an active demand for conferences, or no great effort made to organize conference groups.

B. Methods Used to Promote Conferences.

In our own experience in Kansas we have found that promoting or selling conferences to the management and in some cases to the foremen, consumed considerable time of the conference leader and of others attached to the State Board staff. Accordingly we have included in this study the results of an investigation made as to methods used in other states.

1. Personnel of Sales Organization for Foreman Conferences. State supervisors were asked,* "Who does the promotional work necessary to fill the time of conference leaders?" The replies are summarized in the following chart:

---

*Question 6; Questionnaire A; Appendix A.

CHART 56. SHOWING WHO SELLS THE TIME OF
CONFERENCE LEADER.

No. States Reporting	Replies
9	State supervisor does it.
8	Leader himself does it.
1	Assistant supervisor does it.
6	State supervisor and leader do it.
1	State director does it.
1	Department of Public Instruction staff does it.
1	Local director, teacher trainer and state supervisor.
1	Local director and plant executives.
4	No reporting.
32	

Selecting those states reporting a large conference program during the five year program (Chart 50), we find the following methods of promotion reported:

CHART 57. PERSONNEL FOR PROMOTION WHERE THERE IS
A HEAVY CONFERENCE PROGRAM.

Rank of State Industrially 1920 Census	State	No. of Conferences Reported in 5 years.	Method Reported.
3	Ohio	289	Leader promotes conferences.
9	Indiana	172	" "
18	Virginia	185	Supervisor and leader promote.
27	Iowa	147	Leaders promote.

While Chart 56 shows a variety or scattering of methods used, many states are included which have little or no program of conference work.

Chart 57, however, shows that in each case the leader either promoted his conference or assisted the supervisor in the work.

Conference leaders were asked,* "Do you promote or sell the foreman conference idea among employers?" Their replies are summarized in the following chart:

*Question 37; Questionnaire B; Appendix A.

CHART 58. LEADERS PROMOTING CONFERENCES.

No. Leaders Reporting	Replies
52	Yes.
1	In a limited way.
1	Not directly.
1	Not to any extent.
1	Not necessarily.
10	No.
66	

Here again we find a large proportion of leaders "selling" the conference idea. This would seem to be a sensible procedure. The leader not only knows most intimately the problems of foremen and industry but in his interview with the employer he shows him just what sort of man is to conduct conferences.

2. <u>Methods Used in Selling the Conference Idea</u>. State supervisors were asked,* "What methods are used to convince employers that conferences are worth while?" Their replies are summarized in the following chart:

---

*Question 8; Questionnaire A; Appendix A.

CHART 59. METHODS USED TO SELL CONFERENCES TO
INDUSTRY REPORTED BY SUPERVISORS.

No. States Reporting	Method Reported
15	Interviews.
13	Refer to former conferences as reference or testimonial.
7	Demonstration or sample conference.
3	Conference reports used.
5	Addresses before trade organizations, Chambers of Commerce and Service Clubs.
2	Advertising material.
1	Foreman's Club.
46	

If we were to depend upon this report alone we would believe that the growth of the work so far has resulted more largely from the effects of conferences held than from aggressive salesmanship.

The leaders when asked practically the same question,* went into greater detail and their interesting answers are summarized in the following chart:

*Question 38; Questionnaire B; Appendix A.

CHART 60. METHODS OF SELLING CONFERENCES
REPORTED BY LEADERS.

No.Leaders Reporting	Method Reported
10	Sample Conferences.
9	Consult and sell management.
9	Refer to satisfied customers.
5	Use sample conference reports.
5	Talks before employers organizations.
4	Work through local director of Vocational Education.
3	Demonstration of methods used.
2	Sample conference for plant superintendents.
2	Sales prospectus.
2	Letters followed by visit to employers.
2	Ask pleased executives and factory managers to sell other factories.
1	Consult and sell committee of foremen.
1	Refer to literature on the subject.
1	Cite topics often discussed.
1	Written statement of objectives.
1	Organizing a foreman's club.
1	Arrange by mail or phone with follow-up literature.
1	Have management visit conference in action.

(Chart 60 continued)

1	Offer to sell idea to foremen.
1	Have foremen visit other conferences.
1	Doing the job well.
1	Agreeing to start in as leader and train a plant man to replace me.
1	Discussion at Foreman's Association meetings.
1	Circular letters.
1	Newspaper and magazine articles.

3. Use of Printed Material to Promote Conferences. A study of the two preceding charts shows little mention of the use of printed material.

State supervisors were asked,* whether or not they used printed material in selling conferences. The following chart summarizes replires:

---

*Question 9; Questionnaire A; Appendix A.

CHART 61. USE OF PRINTED MATERIAL BY STATE
SUPERVISORS IN SELLING CONFERENCES.

No.States Reporting	Report
17	Use none.
5	Yes, we use printed material.
1	Conference reports only.
1	Listed objectives and reports of conferences.
20	Not reporting.
44	

Leaders when asked the same question* show substan-

tially the same report as shown by the chart below:

CHART 62. USE OF PRINTED MATERIAL BY CONFERENCE
LEADERS IN SELLING CONFERENCES.

No. of Leaders	Replies
18	Have none.
1	Uses conference reports.
1	Uses announcements of previous "courses."
8	Have such material.
1	Material not yet completed.
50	Not reporting.
79	

*Question 39; Questionnaire B; Appendix A,

An executive once told the author of this study that
vocational directors were poor salesmen in that they had
little or no definite facts in printed form to leave with
an executive after an interview. If he is correct in his
estimate of the value of written material, then the sell-
ing of the foreman conference could be strengthened con-
siderably with a greater use of printed material.

PART IV.

CONFERENCE LEADER TRAINING.

A. Qualities Necessary in a Leader of Conferences.
Again we go to the Federal Board for a recommendation
(Bulletin 1927, 125: 21,2):

"It has come to be recognized that an individual who
can successfully carry on conference work should have cer-
tain qualifications. These qualifications, in the light of
present experience, appear to be as follows:

1. The candidate for admission to the training group
   must have knowledge of the fundamentals of fore-
   manship. This means that he must have had ex-
   perience in the kind of a job which a foreman has,
   not necessarily as a foreman, but he must have
   had experience in acting as the leader of a
   'gang' and in getting the 'gang' to accept his
   leadership. His experience need not necessarily,
   however, have been in industrial work.

2. The candidate must have leadership ability. This
   means that he possess the usual attributes
   which are commonly secured in analyzing leadership.

3. The candidate must be able to affect the atti-

tudes and thinking abilities of others. This means
that he must be a teacher in the broad sense of
the word rather than instructor in the narrow
sense of the word.

4. He must be what is commonly known in industry as
a high-grade man. This covers intelligence and
ability in practically all situations. It is
the type of man who will come to the front in
any environment in which he happens to be placed,
whether it happens to be in the line of his own
specialty or not.

5. He must have 'presence' in the sense of suitable
manner of dress, suitable manners, and general
personal characteristics which will not inter-
fere with his establishing satisfactory relations
with the group.

6. He must have adaptability to given situations.

7. He must have a considerable degree of intelligence.

8. He must be of the nonacademic type of mind; that
is, he must naturally think in concrete terms
rather than in abstractions.

9. He must have a knowledge of the conditions faced
by workers in industry.

10. He must have a knowledge of industrial organ-
    izations in general.

11. He should have high ethical standards.

12. He should be open-minded.

13. He should be able, if necessary, to take part in
    an argument without giving offense.

14. He should be absolutely square and honest.

15. He should be the type of individual who will be
    consistent in all his relations.

16. He should be the kind of individual that people
    naturally like on first contact.

17. He should have an interest in personnel problems
    as well as production or research problems.

In proportion as an individual possesses the above
characteristics, he may be regarded as good potential ma-
terial for admission to a training course for conference
leaders."

It will be noted that the foregoing list includes both
natural characteristics and certain types of knowledge
coming from experience.

State supervisors were asked,* "What are the ten most
desirable qualities in a foreman conference leader?" Over

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*Question 18; Questionnaire A; Appendix A.

one hundred descriptions of qualities were given. Many
seemed to over-lap or to be duplicates. It should be pre-
sumptious however, for the author of this study to attempt
to re-define some of the descriptions of qualities given,
for many of them may mean quite different things to
different people.

The twenty-two qualities most frequently mentioned are
listed in the following chart:

CHART 63. MOST DESIRABLE QUALITIES IN CONFERENCE
LEADERS REPORTED BY STATE SUPERVISORS.

No. Times Mentioned	Quality
19	Good (or pleasing) personality.
17	Wide industrial experience.
16	Tactfulness.
12	Ability to inspire confidence.
10	Analytical mind.
9	Quick thinking ability.
9	Good sense of humor.
8	Poise, self possession, self control.
7	Resourcefulness.
6	Ability to keep from talking too much (a good listener).
6	Ability to mix well (good mixer, friendly disposition).

(Chart 63 continued)

6	Understanding men (judge of human nature).
5	Straight thinker (level headed).
5	Good command of English.
4	Ability to control discussion.
4	Teaching skill and experience.
4	Ability to handle men.
4	Ability to draw others out.
4	Good judgment.
4	Diplomacy.
4	Impartial (square, fair).
4*	Patience.

No doubt but what most of these qualities have been included in the Federal Board qualifications, but this list goes into greater detail.

The complete list of qualities mentioned should prove of interest to those who are interested in the subject of training conference leaders and is arranged in the following chart:

---

*Note: "Knowledge of and ability to use conference methods" was mentioned eleven times. Since this would be necessary in any case, it has not been included in the chart.

CHART 64. COMPLETE LIST OF DESIRABLE QUALITIES IN CON-
FERENCE LEADERS REPORTED BY STATE SUPERVISORS.

Qualities	Frequency of Mention
I Education and Training:	
1.Good command of English.	5
2.Teaching skill and experience.	4
3.Good education.	3
4.Broad training.	1
5.Knowledge of economics.	1
6.Wide reader.	1
II Business Experience:	
1.Wide industrial experience.	17
2.Understanding men (judge of human nature).	6
3.Ability to handle men.	4
4.Knowledge of foremanship.	1
5.Demonstrated leadership ability in industry.	1
6.Supervising ability.	1
7.Appreciation of human relationships (and labor problems).	2
8.Know the language of a variety of industries.	1
III Physical Qualities:	
1.Wholesome appearance.	1
2.Physical qualities of leadership.	1
3.Masculinity.	1
4.Good voice.	1
5.Good health.	1
IV Conference Methods and Experience:	
1.Knowledge of and ability to use conference methods.	11
2.Ability to keep from talking too much (a good listener).	6
3.Ability to control discussions.	4
4.Good writer on blackboard.	2
5.Not pose as teacher (or lecturer).	2
6.Ability to keep himself in the background.	2

(Chart 64 continued)

7.Ability to summarize opinions.   1
8.Ability to promote thinking of group.   1
9.Be a good floor manager.   1
10.Keep his own views to himself.   1
11.Ability to keep his mind on several
things at one time.   1
12.Willingness to admit he doesn't know
it all.   1
13.Ability to draw others out.   4
14.Good organizer of conference material.   1
15.Ability to close each meeting with an
interesting problem under discussion.   1 ,

V Personal Qualities:

1.Good or pleasing personality.   19
2.Tactfulness..   16
3.Ability to inspire confidence.   12
4.Analytical mind.   10
5.Quick thinker.   9
6.Good sense of humor.   9
7.Poise (self possession, self control).   8
8.Resourcefulness.   7
9.Ability to mix well (good mixer,
friendly disposition).   6
10.Straight thinker (level headed).   5
11.Good judgment.   4
12.Diplomacy.   4
13.Impartial (square dealer, fair).   4
14.Patience.   4
15.Adaptability,(versatility).   3
16.Ability to plan ahead.   3
17.Executive or managerial ability.   3
18.Honesty (sense of frankness, justice).   3
19.Leadership.   3
20.Initiative.   2
21.Intelligence.   2
22.Self confidence.   2
23.Horse sense.   2
24.A desire to learn from others.   1
25.Broadmindedness.   1
26.Intellectual honesty.   1
27.Cheerfulness.   1
28.Self control.   1
29.Cooperative spirit.   1

(Chart 64 continued)

30.Integrity.	1
31.Enthusiasm.	1
32.Ability to demand respect.	1
33.Open-mindedness.	1
34.Ability to sense situations, person's feelings and attitudes.	1
35.Sincerity.	1
36.Speaking ability.	1
37.Alertness.	1
38.Business-like attitude.	1
39.Punctual.	1
40.Character.	1
41.Close observer.	1
42.Able to mask feelings.	1
43.Even temperament.	1
44.Courtesy.	1
45.A sense of propriety.	1
46.Consistency.	1
47.Good actor.	1

Leaders were also asked the same question,* "What are the ten most desirable qualities in a man in order for him to be successful as a conference leader?"

In order to make replies comparable with those of state supervisors, the twenty-two qualities most frequently mentioned are listed in the following chart:

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*Question 49;   Questionnaire B;   Appendix A.

CHART 65. MOST DESIRABLE QUALITIES IN CONFERENCE
LEADERS REPORTED BY LEADERS.

No. Times Mentioned	Quality
23	#Tact
18	#Straight or clear thinking.
16	#Pleasing personality.
14	#Good judgment and common sense.
11	#Good sense of humor.
11	#Absolute honesty.
10	#Patience.
10	#Ability to command confidence and respect.
9	#Understanding of human nature.
8	#Ability to direct discussion.
8	#Ability to keep still.
8	#Good mixer.
8	Leadership qualities.
8	#Resourcefulness.
7	#Poise.
7	#Self control.
7	#Open-mindedness.
6	#Ability to speak (easily or well).
6	#Self confidence.
5	#Ability to lead and influence men.

(Chart 65 continued)

4	Unobtrusiveness.
4	Alertness.

#These qualities were mentioned among the first twenty-two
by state supervisors.

It is an interesting thing to note how closely in
agreement state supervisors and conference leaders are in
this matter. All except three qualities mentioned by
leaders in the list of 22 are listed by state supervisors
in their list of twenty-two. The balance of the list as
given by leaders is too long for reproduction in this study
since it is similar to that furnished by state supervisors.

In closing the discussion on this topic the following
quotation from Cushman (1927, Page 27, 8), makes an ex-
cellent summary showing the qualities mentioned as put to
use by the conference leader:

"A conference leader is likely to be successful in
his work in proportion as:

1. He knows his objectives.

2. He has thought his work through in advance of
   meeting his group.

3. He succeeds in establishing good working relation-
   ships with his group.

4. He avoids posing as a teacher or a professor.

5. He stimulates and guides discussion related to his objectives.

6. He promotes and encourages active constructive thinking on the part of his group.

7. He secures or prepares suitable auxiliary material for use in conferences.

8. He notes down and organizes on a blackboard or paper chart, for the purpose of stimulating thought on the part of the group and helping them to arrive at sound conclusions.

9. He avoids imposing his views and opinions upon the group.

10. He practices good methods of conference management in order to keep his group under control without apparent effort on his part to dominate the situation.

11. He respects the confidence of the group members and avoids gossip.

12. He conducts himself naturally but with a certain amount of reserve. He avoids making himself cheap.

13. He avoids being pedantic and refrains from em-barrassing members of the group when they happen

to know less than he knows about certain things.

14. He respects the intelligence and good taste of
his group and consequently avoids the use of cheap
jokes, profanity and questionable stories to
illustrate his remarks.

15. He makes every conference session both interest-
ing and profitable to the group members.

16. He keeps track of the work done and the ground
covered at each session for the purpose of pre-
paring a report.

B. Occupations From Which Conference Leaders May
Be Drawn With Some Certainty Of Success.

The Federal Board (Bulletin 1927, 125:23 and 26) gives
some observations relative to occupations from which lead-
ers are often drawn:

"Actual experience as a foreman in industry is also
a highly desirable asset where it can be secured, to the
extent that an experience in 'going through the same mill'
serves to contribute to good working relations from the
start.

Experience has noted that individuals of the engi-
neering type of mind, or of the type of mind which works
well in research work, are usually less likely to prove

good material than minds of other types. The tendency of the engineer or of the technical man is to look upon educational work of any kind as largely instructional or informing in character, and to resort to methods more or less suitable for those types of educational work, but not suited to conference work.

Moreover, by virtue of his training, he has a tendency to slip into the role of a production expert and, hence, instead of conducting a conference, he is always liable to assume the position of an instructor when instruction is not called for. This does not mean that all such in individuals may not be good material for training as conference leaders, but where they show distinct characteristics or experiences of this type, it would be well for the trainer of conference leaders to take time to secure additional evidence as to their real characteristics before admitting them.

It is also well to remember that there is a tendency on the part of industrial concerns to select for training for conference leading an individual whose past experience has been educational in its character, if they have such an individual in their organization. They are apt to select, for example, their apprentice trainer, and if they select an outsider, they are quite apt to pick out a

regular school teacher. Individuals of this type may make good conference leaders, but they are under more 'suspicion' than an individual whose experiences have been of another type.

It may be mentioned incidentally that experience as a regular school teacher is probably a negative asset. This is equally true of experience as a technical expert, a lecturer, or public speaker of any kind, and it is held by some people at the present time that an experience in a higher executive position is undesirable because it tends to make the conference leader take an authoritative position by force of habit."

Sanders (1926, Page 102) quotes Mr. C. R. Allen as follows:

"One of the greatest handicaps to a man as a conference leader is to be an ex-school teacher. They are so apt to revert to instructional methods. Essentially the conference leader is not an instructor. If he started to instruct it makes it almost impossible for him to put it over."

The Federal Board (Bulletin 127:4,5), while studying the conference leader training program of 1926 and 1927 found that men in the following positions had been trained as leaders:

CHART 66. MEN TRAINED AS LEADERS 1926 and 1927.

Public Educational Agencies:
    Department of engineering extension ----- 5
    State teacher-training institutions:
        Conference leader   2
        Teacher trainer   1   3
    State supervisors of trade and
      industrial education-------------------- 10
    City directors and supervisors of
      vocational education-------------------- 12
    Professor of industrial education ------- 1   31

Automobile industry:
    Personnel department --------------------- 7
    Employment managers --------------------- 2
    Engineers ------------------------------- 3
    General foremen ------------------------- 4
    Superintendent of production ------------ 1
    Safety engineers ------------------------ 2
    Member of factor managers' staff -------- 1
    Production manager ---------------------- 1
    Production foreman ---------------------- 1
    Industrial manager ---------------------- 1
    Superintendent -------------------------- 1
    Chief inspector ------------------------- 1
    Industrial relations department --------- 1   26

Coal mining:
    Instructor and educational supervisor ----------- 1

Electrical machinery:
    General foreman --------------------------------- 1

Electric railways:
    Engineer -- 1

Foundry* --- 1

Furniture manufacturing:
    Assistant superintendent ------------------ 1
    Foreman ----------------------------------- 1   2

Laundry:
    Office executive -------------------------------- 1

(Chart 66 continued)

Machinery and metal manufacturing:
  Assistant superintendent ------------------ 1
  General foreman ------------------------- 2
  Special representative ------------------ 1
  Master mechanic ------------------------- 1
  Plant engineer -------------------------- 1
  Office manager -------------------------- 1
  Superintendent -------------------------- 1
  Production foreman ---------------------- 1
  Unclassified ---------------------------- 1   10

Meat packing:
  Personnel supervisor -------------------- 1
  Assistant superintendent --------------- 2
  Employment manager ---------------------- 1
  Maintenance man ------------------------- 1   5

Metal Mining:
  Engineer -------------------------------------- 1

Miscellaneous industries:
  General foremen ------------------------- 2
  Employment manager ---------------------- 1
  Superintendent -------------------------- 1
  Supervisors of instruction -------------- 2
  Educational director-------------------- 1
  Unclassified ---------------------------- 1   8

Oil refining:
  Engineer -------------------------------------- 1

Public service corporations:
  Manager --------------------------------- 1
  Superintendent -------------------------- 1
  Employment supervisor ------------------- 1
  Division superintendent ----------------- 1
  Plant employment supervisor ------------- 1
  Foremen --------------------------------- 2
  Construction engineer ------------------- 1
  Safety engineer ------------------------- 1
  Educational director -------------------- 1   10

(Chart 66 continued)

Railroad shop:
    Instructor ------------------------------ 1
    Supervisors of apprentices -------------- 2   3

Rubber:
    Foreman -- 1

Silverware manufacture:
    Personnel department ------------------------ 1

Woodworking establishment:
    Personnel manager --------------------------- 1

                                                      105

*Position not known.

A study of this chart shows superintendents, production managers and many others who are above the foreman in authority have been trained as leaders.

At a conference leader's training course at Blue Ridge, North Carolina, in August, 1926, and at Topeka, Kansas, in February, 1927, the author of this study found that the question of possible handicap to leaders because of their position in industry was stressed. Foremen may not be willing to come forward with actual happenings in their department when the general foreman or other higher official is acting as leader. It was felt that it would seem too much like a "confessional" to the foreman.

This feeling in the matter on the part of leader trainers resulted in a check-up on this point in connection with this study. State supervisors were asked[*] to list the occupations from which the best conference leaders come. The following chart summarizes the answers:

CHART 67. OCCUPATIONS FROM WHICH CONFERENCE LEADERS MAY BE DRAWN. STATE SUPERVISOR'S LIST.

Occupation	Frequency of mention
1. Foremen	6
2. Personnel and employment managers.	5
3. Engineering.	4
4. Teachers of vocational subjects.	3
5. Superintendents in industry.	2
6. Vocational education administration.	1
7. Assistant superintendents in industry.	1
8. Production supervisors.	1
9. Plant educational directors.	1
10. Vocational school directors with industrial experience.	1
11. Vocational coordinators.	1
12. Vocational supervisors.	1

[*]Question 17;   Questionnaire A; Appendix A.

(Chart 67 continued)

13. Mechanics with fairly good general education.	1
14. From industry in which he expects to conduct conferences.	1
15. Pattern maker.	1
16. Machinist.	1
17. Millwright.	1
18. Blacksmith.	1
19. Apprentice instructors.	1
20. Stores department men.	1

In some instances teacher trainers in charge of fore-man training answered the questionnaire for state super-visors. The following chart lists their answers to the question:

CHART 68. TEACHER TRAINER'S LIST OF OCCUPATIONS
FROM WHICH LEADERS MAY BE DRAWN.

Occupation	Frequency of Mention
1. Plant superintendents.	3
2. Personnel managers.	2
3. Ex or former foremen.	2
4. Industrial teachers.	1
5. Supervisors.	1
6. General foremen.	1
7. Foremen.	1
8. Production manager.	1
9. Educational director.	2
10. Safety engineer.	1
11. Planning engineer.	1
12. Chemist.	1
13. Chief inspector.	1
14. Technical engineer.	1
15. Plant managers.	1
16. Department superintendents.	1
17. Experienced educators.	1
18. Itinerant conference leader plus trade experience in Industrial Arts.	1
19. Teacher trainers.	1
20. Trade school teachers.	1

As might be expected opinions among those answering the question vary. No doubt, though each man was thinking of an individual in each occupation mentioned who either had made good as a leader or that he believed could be trained to make good.

Further examination of the two lists show that foremen, ex-foremen, plant superintendents and personnel directors are most often mentioned.

In addition to the listings some personal opinions that were given are worthy of notice.

"Industrial experience -- Personal qualifications are more important than position."

"No particular trade."

"------stress should be laid upon the man rather than the occupation."

"This may depend upon the specific objectives to be accomplished and upon the personalities involved. I have seen men from almost every kind of occupation make a success of conference leading."

"I doubt much if the occupation has anything what-so-ever to do with making a conference leader."

"From the more complex occupations."

"Depends entirely upon the man himself. However, it

is very necessary that he should have had industrial experience."

"Men who have come up through the ranks, combining ability and push with such educational opportunities as were open to them. Usually found in the technical branches or staff positions."

Conference leaders when asked the same question* furnished the following list of occupations:

CHART 69. OCCUPATIONS LISTED BY CONFERENCE LEADERS
FROM WHICH LEADERS MAY BE DRAWN.

Occupation	Frequency of mention
1. Foremanship.	18
2. Personnel director.	10
3. Almost any occupation; depends on the man.	6
4. Executive experience.	6
5. Vocational education teacher.	5
6. Factory department head.	5
7. Factory superintendent.	4
8. Teachers.	3
9. Employment department men.	3
10. Vocational education administrators.	3
11. Engineers.	3

*Question 47; Questionnaire B; Appendix A.

(Chart 69 continued)

12. Assistant superintendents.	1
13. Apprentice instructors.	2
14. Junior executives.	2
15. Works managers.	2
16. Company educational director.	2
17. Worker in plants of large production.	1
18. Foreman (college trained).	1
19. University extension teacher.	1
20. Private educational representative.	1
21. Industrial experience but not an educator, as a rule.	1
22. Safety engineer.	1
23. Master mechanic.	1
24. Assistant foreman.	1
25. Practical trade school principal.	1
26. Teacher trainers.	1
27. Educators with industrial experience.	1
28. Manual training teachers with trade experience.	1
29. Engineering teachers with managerial experience.	1

One leader states "Leading conferences is an art in itself. Leaders can be secured from any occupation if they have the capacity for learning the art."

The leaders are in the main in greater agreement on occupations than are the state supervisors. Out of 90 occupations listed 66 of them plainly indicate industrial experience. It is evident that this is considered an asset to those who would practice "the art".

On the whole, the men in the field do not agree very well with the authorities quoted, in this respect.

C. Higher-Ups as Conference Leaders.

Leaders were asked the question,* "In your opinion does the higher up make an effective part-time conference leader of his own foremen?" The answers are summarized in the following chart:

---

*Question 48; Questionnaire B; Appendix A.

CHART 70. ADVISABILITY OF HIGHER-UPS CONDUCTING
CONFERENCES OF OWN FOREMEN.

No. of Leaders	Replies
33	No.
4	Very seldom.
1	Not necessarily.
1	Debatable.
22	Sometimes; depends on conditions or individual.
1	Yes, in large organizations.
7	Yes.
69	

More than half the leaders replying to this question
see a possible danger in the practice.

D. Methods of Training Leaders.

The Federal Board (Bulletin 1927, 127:7) makes the
following recommendations on method of training:

"A minimum amount of necessary information on the
general principles of conference work should be made a-
vailable at the beginning.

Practice in conducting specimen conferences by each
member of the group should be the principal feature of the

course. Additional information should be given as the need for it becomes apparent in connection with these demonstrations.

It is desirable to provide opportunities for observation of actual conference work with foremen.

Practice conferences by group members should be planned.

The instructor should assist each man individually in planning his demonstration conference.

Each group member should conduct at least two specimen conferences.

Each practice conference, good or bad, should be thoroughly analyzed and discussed, on a professional basis, for the benefit of the group."

Conference leaders were asked the question,* "What in your opinion is the best and most practical method of training conference leaders?" The following chart summarizes the methods suggested:

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*Question 46; Questionnaire B; Appendix A.

CHART 71. METHODS OF TRAINING CONFERENCE LEADERS
SUGGESTED BY LEADERS.

No. of Leaders	Method Suggested
19	Demonstration by experienced leader and practice on the group in training.
5	Put to work and coached by experienced leader.
4	Learn by doing.
4	Federal Board method (Bulletin 125).
4	University or other extension course.
4	Intensive training, actual practice plus follow up.
3	Observation, discussion with leader then conduct conferences. Formal training to follow.
3	Sit in a conference and start out under supervision.
2	Intensive leader training plus sitting in real conference.
1	Sit in several conferences as secretary and then be thrown overboard.

Leaders differ somewhat in their ideas of how the training job should be done. However, an analysis of these methods is given in the following chart:

CHART 72. ANALYSIS OF TRAINING METHODS SUGGESTED.

No.Leaders Reporting	
23	Actual practice as a part of training.
15	Supervision or follow-up on the job.
9	Observation of actual conferences.

It is plainly shown from the experience of leaders that these are requisites of complete training as well as demonstration and practice on group members.

E. Length of Training Course.

Leaders in some cases mentioned the length of training period needed for satisfactory training. The Federal Board (Bulletin 1927, 125; Pages 28, 29), has made suggestions in this matter.

"The time required for an effective training course can not be definitely stated at this time. Experience that has been secured to date would indicate that a minimum of 35-40 hours is necessary for the informing and appreciation stages.

If a maximum use is made of psuedo conference experience on the basis of a group of 20, it is now held by certain experienced people that every member of the group

should have an opportunity to conduct at least two psuedo conferences, each conference, with a subsequent discussion, occupying at least one and one-half hours. This would mean, for a group of 20, sixty hours of psuedo conference work alone, in which case the total time required would run very close to one hundred hours for the first two stages of the course.

If the training for doing ability is to be given under actual working conditions, not over three members of a training group can be taken into a foreman conference at any one time, and observation and practice would require at least four days, preferably five days. This means, for a group of 20, with the foreman group meeting three hours, a total of two hundred and forty hours for a group (12 hours for each individual). The two hundred and forty hours would represent the time of a competent conference leader on the job, working with a group of foremen. Training in technique subsequent to this experience, should this organization be adopted, would mean from twenty-six to forty hours more.

This means that the training program in so far as the trainer of conference leaders is concerned, would have to cover a period of approximately three months, of which three weeks would be given to group work in the informing,

appreciation, and elementary training stages, while the remainder would represent job observation and experience of groups of two or three members working under supervision with actual foreman groups. The total time for each group member would be about four weeks, or about 120 hours, however the time was distributed.

The chief danger, threatening the success of the average course for training conference leaders, lies in the ill-advised attempt to carry it through on the basis of too little time. A fair estimate of the minimum time necessary for such a course would be as follows:

1. Time for putting over elementary training, ap-
   preciation objectives, and information, two
   or three weeks, according to size and amount
   of pseudo experience required.

2. Time of a conference leader on the job with
   foremen (to furnish means of observation and
   practice for 20 trainees), two months.

3. Intensive group training work following ob-
   servation and practice on the job, one week."

The leaders mentioned periods of time for training leaders varying from one week to two years. One leader mentioned from five to six weeks as necessary. One state puts on a week of intensive training followed later by

another week. This may be a good plan if the same indi-
viduals are sure to return for a second week. At best two
weeks is too short a time for real training.

Those mentioning a longer period must have included
follow-up as a part of the training method. The Federal
Board (Bulletin 1927, 125:29 and 30) states: "For the
general success of the program, however, it is necessary
that some follow-up service should be provided. This ap-
pears to be a service which a State department should be
equipped to render. The individual who gives this service
should be himself a competent conference leader and he
should be assigned to the duty of working with the trainees
after they take hold of the work themselves 'under their
own power,' assisting them in organizing the work and in
carrying it on."

There is no doubt but what such follow-up service
should be furnished.

PART V.

RESULTS FROM USE OF CONFERENCE METHOD.

A. Extent of Educational Program Resulting
from Conferences.

Cushman (1927, Page 70) in discussing the results to
be expected from conferences states, "Another value which
is very often secured is an increased interest on the part
of the men in education and training not only for them-
selves but for the men under their supervision. In many
instances foremen have become enthusiastic boosters for
apprenticeship and other forms of trade and industrial
education--------."

On the other hand Spahr (1925, Page 24) states, "It
is truly amazing to note in the vast correspondence which
the Department of Manufacture has conducted with hundreds
of industries on foreman training activities the lack of a
definite 'follow-up' after a SINGLE COURSE HAD been given.
Such lack of planning with regard to material, processes
or equipment would not be tolerated for a minute by these
same companies.

IT IS EVEN MORE AMAZING WHEN IT IS CONSIDERED THAT
AN OVERWHELMING MAJORITY TESTIFY THAT THE INDIVIDUAL

COURSES GIVEN PAID DIVIDENDS.

A number frankly admitted that they were anxious to continue but 'ran out' of material and desired suggestions; others that they simply neglected, in favor of exigencies arising in the immediate post, what they conceded to be an important function but one seemingly easy to postpone."

Conference leaders were asked to give the names of important companies for whom they have conducted conferences. In response they gave us the names of 280 companies. Of these 116 responded.

These companies were asked the following question,* "Did foreman conferences lead to further educational work for foremen or for workers?" The replies are summarized in the following chart:

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*Question 7;   Questionnaire C;   Appendix A.

CHART 73. EXTENT OF EDUCATIONAL WORK FOLLOWING
FOREMEN CONFERENCES.

No. Companies Reporting	Replies
2	Apprentice training.
1	Foremen meet weekly. Plans under way for workers.
5	Educational work for foremen.
1	Believe correspondence courses among the men resulted.
1	Weekly plant meetings.
55	Yes, educational work resulted (no particulars as to whether for men or foremen).
41	No; no educational work resulted.
10	No report on question.
116	

Here again reports are disappointing. Only about one-half the companies reported any educational work resulting.

The companies were also asked,* "After the leader closed his series of conferences were foreman conferences continued by the company or foremen in an organized way?" The replies to this question are as follows:

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*Question 8; Questionnaire C; Appendix A.

CHART 74. EXTENT OF ORGANIZED FOREMAN CONFERENCES
FOLLOWING INITIAL CONFERENCES.

No. Companies Reporting	Replies
48	Yes - organized conferences.
47	No conferences.
6	No report.
5	Yes - weekly.
4	Yes - conferences in Fall.
3	Yes - monthly.
2	Yes - Foreman's Club.
1	Yes - semi-monthly.
116	

Here again we have almost as many having no further conferences after the initial series as we have carrying them on. It would seem as if the condition reported by Spahr in 1926 has not been greatly remedied.

That an extended program can be carried on is evidenced by the record of J. Norman Spawn, Educational Director for the Champion Fiber Company as shown by his letter to the author of this study:

"Through the effort of Mr. George W. Coggin, State Supervisor of Industrial Education of North Carolina, a

Foreman's Training Conference was arranged to be held at the plant of the Champion Fibre Company at Canton, North Carolina, early in the fall of 1921.

"This Conference was conducted by Mr. Frank Cushman of the Federal Board of Vocational Education. It made a lasting impression upon the management, superintendents and foremen of this plant, with the result that some time later it was decided to make this type of training a permanent part of their industrial education policy.

"In the fall of 1924 this policy was put into effect. Foreman training classes were organized for the foremen and minor executives. Also arithmetic, blue print reading, paper making, steam plant practice and carpentry classes for the workers were started.

"Each year the schedule of classes and enrollment has increased. During the winter of 1927-8, we have followed the attached schedule of classes and had an enrollment of six hundred and eighty-nine, (689) out of a possible thirteen hundred (1300) employees. Besides this about two hundred (200) of our workers are taking International Correspondence School courses.

"A plant will grow as its workers grow and the more the workers know about their jobs, the better product they will produce."

B. An Indication of the Results From the Use
of the Conference Method.

Companies were asked,* "How did your foremen like the conferences?" All replies were very favorable except the following:

"Passively interested, not enthused."

"Not enthusiastic but for the most part interested."

"First year more interested than the second."

"Not over-enthused."

"Foremen are opposed."

These replies are of special interest as they come from companies whose names were suggested by conference leaders. It was supposed by the leaders, doubtless, that their conferences were a success. They may have been, at that, and the questionnaire happened to fall into the hands of some one who was not in sympathy with the program.

This seems an excellent place to quote Cushman (1924, Page 1745):

"An interesting thing in connection with the whole matter, is that there seems to be an mid-point between success and failure. Either the work is highly successful or it falls flat. There seems to be no such thing as a

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*Question 6; Questionnaire C; Appendix A.

'fairly good' foremanship conference, and whether or not such an enterprise will succeed seems to depend, more than anything else upon the skillful handling of the psychological problems presented in the early stages of the work."

As a further indication of the results from the conferences, companies were asked,* "Can you cite any instances where there have been savings in operation due to conferences?"

The following answers are typical:

"No specific outstanding saving, but a general economic action throughout has been quite noticeable."

"Elimination of surplus stocks and reduction of regular stock to minimum. Better cooperation between foremen and understanding with men."

"We think this gives the foreman a better view of his position with relation to his men."

"Many savings were made. No company can go wrong on this if the meetings are conducted properly."

"Considerable. Part of the conference time is taken up by a discussion of manufacturing expenses. Definite action as required is planned, and the results in reduction of manufacturing costs have been very satisfactory."

"Better cooperation and loyalty which will in time

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*Question 10; Questionnaire C; Appendix A.

result in savings to the company."

"General morale and spirit of cooperation decidedly elevated."

"Not specifically."

"General efficiency effected satisfactory."

"No specific instances."

"Too soon yet to fully determine but indications point to several savings worked out in conference to date."

"The foremen have been spurred on to more thinking about their jobs and have been more free to suggest improvements."

"Unable to say."

"Take keener interest in their work and have a better grasp of all matters pertaining to their work."

"From analysis of wastes by getting to the source we were able to effect some saving."

"Many could be cited."

"Nothing that can be traced directly to the conference."

"Improved production. Reduction in forces. Better cooperation between foremen. Good morale."

"Improved cooperation and an open state of mind."

"Reduction of errors in written orders. Saving of time in departments due to a clearer understanding."

"Increased cooperation."

"Tardiness reduced. Accidents reduced. Production with fewer employees. Overhead expense reduced.

"No particular item. Betterment of service generally."

"Foremen better able to cope with their daily problems'

"Savings are brought about thru a better spirit of cooperation and a better knowledge of what a foreman's duties are. These savings are indeterminate in dollars and cents way."

"Increased interest in work."

"Conferences and schools have paid a dividend instead of being an expense to the company."

"No - rather intangible."

"No specific instance but a general improvement thruout the organization."

"Too numerous to mention. However, can gladly recommend foreman conferences as part of the regular duties of any institution."

A study of these answers which are typical of many others for which we do not have space is convincing evidence that foreman conferences do bring excellent results when conducted by qualified leaders.

C. Repeat Orders for Conferences.

In business "repeat orders" are considered strong testimonials for product. Leaders were asked,* In how many instances have companies asked for a second series of conferences?" The replies follow in the chart below:

CHART 75. REQUESTS FOR A SECOND SERIES OF
CONFERENCES BY COMPANIES.

No. Leaders Reporting	Replies
6	In every case.
4	Practically all.
3	All except one group.
1	Year after year.
1	All except two or three in eight years.
1	90% of groups.
1	75% of groups.
1	50% of groups.
1	48 groups.
8	City foreman clubs.
2	5 groups.
2	4 groups.
3	3 groups.

*Question 41; Questionnaire B; Appendix A.

(Chart 75 continued)

2	Several.
5	2 groups.
2	1 group.
1	None except in my own plant.
2	None.
46	

While it is true that only 46 out of 79 reported on
this point the showing of repeat orders is quite satisfying.

PART VI.

SUMMARY AND CONCLUSIONS.

A. Summary on Conference Method.

1. The conference method, while an old form of education has only been applied in Trade and Industrial Education since 1919.

2. The conference method consists of the pooling of the combined experience of a group of individuals to the end that all may be brought to the same experience level. It has been found to be an exceptionally effective device for training individuals in logical and constructive thinking.

3. When compared with other methods of training foremen, such as lectures, text book and correspondence courses and class-room work, the conference method is clearly shown to be an excellent forerunner and also should be used concurrently with such forms of education.

B. The Federal Board Pattern as Arrived at in Federal Board Bulletins, Does Not Always Correspond to the Practices of Experienced Leaders.

1. The Federal Board authorities consider the intensive plan of conferences most effective. More than half the leaders favor the discontinuous or week to week plan.

2. From 12 to 15 is considered an ideal group by Federal Board authorities. Agreement is close to these figures among leaders.

3. Eighteen is the largest number that is recommended to include in a conference group. Leaders report from 12 to 120. The average is 27. This is one indication to the author that conferences as defined by the Federal Board are not always conducted by conference leaders. Some other form of training is being conducted under this name.

4. With less than 12 in the group, interest is lacking because of insufficient experience in the group to pool. However, leaders report from three to ten as a minimum in successful conferences.

5. Leaders are in agreement with the Federal Board that school buildings should not be used for conferences.

6. Leaders also prefer day-time hours for conferences as suggested by the authorities quoted.

7. Short sessions of one to one and one-half hours have proved best according to leaders. This is not in harmony with the Federal Board pattern.

8. The authorities do not encourage the attendance of "higher-ups." Leaders differ upon this decidedly with but two-thirds of those expressing themselves, agreeing with the Federal Board on this point.

9. Leaders also agree that it is best not to have a stenographer present to take a report. This is in harmony with the pattern.

10. The authorities of the Federal Board on the conference method are insistent that in a pure or genuine conference the program shall be elastic and follow the topics of greatest interest to the foremen in the conference group. More than half the leaders reported a more or less set program, even though it was necessary to camouflage the fact and make it seem otherwise. Ten out of 69 leaders showed in their replies a decided reluctance to drop a set topic for one coming from the men, that they felt a keen interest in discussing.

11. Only 38 out of 79 experienced leaders show much familiarity with conference devices as such. Two leaders named only two in use. The average was 9 listed by leaders. Cushman in his book lists 14.

12. The use of analyses by leaders is not general. The pulling out of lists of qualities, etc., and their discussion is the method generally followed. It is regretted that greater use of the formulae is not made as it trains men to think their problems through.

13. Leaders report an even chance of conference groups being interested in a discussion of their responsi-

bilities according as to whether they are supervisory or managerial.

14. Leaders report topics dealing with the handling of men being of greatest interest. Handling materials and equipment have about equal value as second choice.

15. Cushman has furnished us a list of eighteen topics of common interest. Leaders are in close agreement with this list.

16. Federal Board leaders of conferences recognize a list of Danger Topics which should be avoided or discussed with caution. About one-third of the leaders in their replies indicated a belief that there are no danger topics. This is not very close agreement with the pattern on an important point.

17. About half the leaders do not take up topics from the negative angle, although it is advocated in many cases by authorities on the conference method. This again is not close agreement.

18. Authorities recommend selection of topics and conducting of conferences that topics do not need to be carried over or continued in another session. Leaders are not in agreement on this point for the majority of them see no disadvantage in the carrying over of topics.

19. More than half of the leaders announce topics for discussion in advance. This is not recommended by Federal Board authorities.

20. The conference method according to the pattern has no auxilliary information introduced. The leader does not pose as an efficiency man or as a teacher. While most of the leaders agree with this principle there is an indication that about one-third of the leaders encourage this practice or actually do considerable teaching of the group.

21. Few leaders furnish foremen with daily reports of conference sessions although it is recommended. Two-thirds of the leaders submit a final report of conferences.

C. The Conference Method, Although Mentioned in this Study Particularly for Foremen is Used With Success With:

    1. Adolescents.

    2. Teacher Training.

    3. College Seminars.

D. By Comparison with Information on Habit Psychology and with the Steps in Constructive Thinking, We May Conclude that the Conference Method is an Effective Educational Device.

E. The Growth in the Use of the Method Has Not Been Rapid.

1. Of the 46 states furnishing information no conference training is given in twelve of the states. Few agencies outside of State Boards for Vocational Education and state teacher training institutions are attempting it. Only one to three leaders in a state are at work under such agencies.

2. In 1924, a total of 121 conferences are reported with 3153 foremen attending. In 1928, there were but 371 conferences held with but 8785 foremen in attendance.

3. Compared with the workers employed in manufactures, in each state, the number of foremen trained is in most cases is disappointing. The proportion runs from 17 workers in Arizona to 7255 in Illinois for each foreman who has attended conferences. The average is 686 workers to one foreman attending.

4. While the Federal Board has encouraged the training of leaders for industries by the states, almost nothing has been done along this line except in New York State. State supervisors to a large extent do not know of any demand on the part of industry.

5. There is little advance booking of the time of conference leaders by State Boards. This is another indi-

cation of lack of demand. When conference leader's time is "sold", he is usually the one who does it.

6. A variety of methods are used to "sell" the conferences to industry. Few leaders or supervisors report any printed material to supplement their interviews.

F. Conference Leader Training.

1. While the Federal Board authorities feel that working at certain occupations or holding certain positions would handicap men as conference leaders, leaders and state supervisors do not seem to have that feeling, freely mentioning such occupations and emphasizing that "its the man that counts."

2. Leaders are almost equally divided as to the advisability of "higher-ups" conducting conferences of their own foremen. This is a policy not recommended by the authorities on the subject.

3. Considerable emphasis is placed on experience and follow-up by leaders. This is in line with the Federal Board Pattern.

4. There is much difference of opinion among leaders as to the length of training period.

G. Results From Conferences.

While employers responding expressed themselves as pleased with initial conferences there has not been the continuation of the work in an organized way that should be expected.

Conferences have resulted in very little educational work of other sorts in plants, according to information secured for this study.

H. General Summary And Conclusions.

The Conference Method is effective and well liked where tried out. There should be more emphasis placed upon the training of leaders for Industry.

There should be some district or regional meetings of conference leaders in order that they too may pool their experience.

There has not been the "market" for the conference method built up which should have been during a five year period.

There should be more salesmanship of the conference method used with industry. There should be a closer follow-up to see to it that further educational work is carried on with the foremen and their workers.

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*In this study the Federal Board for Vocational
Education will be hereafter referred to as
"The Federal Board."

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APPENDIX A.

KANSAS STATE TEACHERS COLLEGE, PITTSBURG

CO-OPERATING WITH
KANSAS STATE BOARD FOR VOCATIONAL EDUCATION
IN
A STUDY OF THE FOREMAN CONFERENCE

From...

....

....

1. Does your department conduct foreman conferences in the industries in your state?

    ....

2. Do the Teacher-Training Institutions in your state conduct foreman conferences?

    ....

3. What are the names of such leaders?

Name	Address

4. For how many years have you been offering this service to foremen?.........................

5. Estimate of extent of foreman conference work in your state.

Year Ending June 30	No. of Conference Groups	No. of Foremen Reached
1928		
1927		
1926		
1925		
1924		

6. Who does the promotional work necessary to fill the time of conference leaders?

....

7. How far in advance are you able to fill the time of conference leaders?.........................

....

8. What methods are used to convince employers that conferences are worth while?

....

....

....

....

9. If you use any printed matter in promotional work, will you mail samples to form a part of this study?..........................

10. For what industries of your state have you trained foreman conference leaders?

Company	Address	Product	Name of Leader
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

11. What methods did you use to train foreman conference leaders?

....

....

....

....

12. What industries in your state are conducting foreman conferences by means of leaders trained independently of your services?

Company	Address	Product
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

13. What other uses do you have for the conference method other than in foreman conferences? ....

....

....

....

14. Have you found the conference method successful in connection with vocational teacher-training work?..........................

15. Are there enough well-trained conference leaders to satisfy the demand for their services?..........................

16. What do you consider to be the best method of training conference leaders?

....

....

....

17. From what occupations can men be secured who have had the training or background that helps them to make the best conference leaders for foremen? Please list these in the order of desirability.

1. ....
2. ....
3. ....
4. ....
5. ....

6. ....
7. ....
8. ....
9. ....
10. ....

18. What are the ten most desirable qualities in a foreman conference leader? Please list them in the order of desirability.

1. ....
2. ....
3. ....
4. ....
5. ....

6. ....
7. ....
8. ....
9. ....
10. ....

19. Can you give us the names of others in your state who have at some time had experience as foreman conference leaders?

Name   Address

1. ....
2. ....
3. ....
4. ....
5. ....

20. Would you be interested in having a copy of the study resulting from this questionnaire?............................

21. Remarks: ....

....

....

....

....

....

....

....

A—5

(Name)

(Position)

KANSAS STATE TEACHERS COLLEGE, PITTSBURG

CO-OPERATING WITH

KANSAS STATE BOARD FOR VOCATIONAL EDUCATION

IN

A STUDY OF THE FOREMAN CONFERENCE

From...

....

....

1. Do you prefer the intensive type of foreman conference held daily for two weeks, or the week to week type, held once a week for ten or more meetings?...........................

   Why? ....

2. What do you consider the ideal size group for successful foreman conferences?

   ....

3. What is the largest group you have handled successfully by the conference method?

   ....

4. What is the smallest group you have handled successfully?

5. Do you prefer morning, afternoon, or evening hours for conferences?

6. How long a conference session do you consider most effective?

7. Where do you prefer to hold conferences, in the plant, Y. M. C. A., Chamber of Commerce, public schools, etc.?...........................

8. Do you encourage or discourage the attendance of "higher ups" in conference sessions?

   ....

9. Do you have someone keep notes of discussion to form the basis for your reports?

   ....

10. Does a member of the group or a stenographer do this?...........................

11. Do you furnish the management with copies of the reports of each day's session?...........

    ....

12. Do you furnish the men with daily reports of the sessions? ....

13. Do you usually submit complete reports of conferences to employers?...........................

    ....

B—2

14. If so, will you send us some typical reports to form a part of this study?............................

15. Do you keep names and other means of identification of foremen out of your reports of discussion?............................

16. Which class of topics do you find foremen most interested in discussing:

    Handling men? ....

    Handling equipment? ....

    Handling material? ....

    NOTE—Please rate No. 1, No. 2, No. 3, making No. 1 the class of topics in which the foremen are most interested.

17. Do you find that foremen are interested in classifying their responsibilities as to those of a manager and those of a supervisor?............................

18. In a series of ten meetings what are the topics you have found foremen most interested in discussing? Please list them in the order of greatest interest value.

    1. ....   11. ....

    2. ....   12. ....

    3. ....   13. ....

    4. ....   14. ....

    5. ....   15. ....

    6. ....   16. ....

    7. ....   17. ....

    8. ....   18. ....

    9. ....   19. ....

    10. ....   20. ....

19. Are there "so called" "danger topics" which you do not care to have groups handle?

    ....

20. What are some of the danger topics that you often have to discourage? Please list them in the order of greatest undesirability.

    1. ....

    2. ....

    3. ....

    4. ....

    5. ....

21. Do you select in advance the topics for discussion for a series of conferences, or do you depend upon the interest of the group to indicate the topics which should be discussed? ....

22. If you select the topics in advance for conference discussion, do you hand out previously prepared information upon the topics? ....

23. If you select topics for discussion in advance, do you allow the group to discuss another topic which "bobs up" and in which there seems to be a lively interest?...........................

24. Do you require foremen to do any outside reading?..........................

25. Do you require foreman to do any "paper work" outside the conferences, such as reports on phases of work or the rating of responsibilities?..........................

26. How much information which is new to the group (such as efficiency methods and modern production methods) do you feel can be successfully introduced by a conference leader without hurting the success of his conference?...

....

....

27. Do you make it a practice to announce to the group the topic you have selected for the next meeting?..........................

28. Do you find it advisable to open a conference session with an unannounced subject?..........

29. Do you approach some topics from the negative angle?..........................

B—4

30. If so, what are they?

1. ....   6. ....

2. ....   7. ....

3. ....   8. ....

4. ....   9. ....

5. ....   10. ....

31. Do you ever have trouble in carrying over from one session to another a topic which seemed to be a "live topic"? ....

32. Do you set aside the planned topic of discussion in order to allow the group to handle a situation which has just developed in the shop? ....

33. What are the conference devices that you use in successful conferences (See Cushman Text)? Please list these in the order of most frequent use.

1. ....   11. ....

2. ....   12. ....

3. ....   13. ....

4. ....   14. ....

5. ....   15. ....

6. ....   16. ....

7. ....   17. ....

8. ....   18. ....

9. ....   19. ....

10. ....   20. ....

34. Do you stimulate the discussion of the group best through the discussion of lists pulled out of the group or by the use of "cause to effect" formulas? ....

35. Which of these formulas do you find most effective? Please list these in the order of most frequent use.

1. ....   4. ....

2. ....   5 ....

3. ....

36. Have you conducted conferences of groups other than foremen? ....

37. Do you promote or "sell" the foreman conference idea among employers? ....

38. If so, what methods do you find most effective? Please list in the order of greatest effectiveness.

1. ....

2. ....

3. ....

4. ....

5. ....

39. Will you send us samples of your promotional literature to include as a part of this study? ....

40. Please list the important companies for which you have conducted conferences.

Company	Address	Product	No. of Groups
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

41. In how many instances have companies asked for a second series of conferences?

....

42. Do you make it a practice to return for additional series of conferences? ....

43. Please cite instances where companies have engaged trained conference leaders or have had conference leaders trained as a result of your conferences.

	Company	Address	Product	Names of Leaders
1.				
2.				
3.				
4.				
5.				

44. Pleast quote outstanding endorsements of Foreman Conferences on the part of employers and foremen. ....

....

....

....

....

....

....

....

....

....

....

....

....

45. Do you believe there are enough well-trained conference leaders available?...........................

....

46. What, in your opinion, is the best and most practical method of training conference leaders? ....

....

....

B—7

47. From what occupations can men be secured who had had the training or background that helps them to make the best conference leaders for foremen? Please list these in the order of effectiveness of results.

1. ....   6. ....

2. ....   7. ....

3. ....   8. ....

4. ....   9. ....

5. ....   10. ....

48. In your opinion does the "higher up" make an effective part-time conference leader of his own foremen?........................

49. What are the 10 most desirable qualities in a man in order for him to be successful as a conference leader? (No. 1 most important and No. 10 least important.)

1. ....   6. ....

2. ....   7. ....

3. ....   8. ....

4. ....   9. ....

5. ....   10. ....

50. Do you wish to be sent a copy of the study of which this questionnaire will form a part?........................

51. Remarks: ....

....

....

....

....

....

....

....

....

(Signed)

(Position)

KANSAS STATE TEACHERS COLLEGE OF PITTSBURG
CO-OPERATING WITH
KANSAS STATE BOARD FOR VOCATIONAL EDUCATION
IN
A STUDY OF THE FOREMAN CONFERENCE

From..

....

....

We are asking your co-operation in connection with a study we are making of foreman training by the conference method. It has been reported to us that foreman conferences were conducted in your plant.

1. When were conferences conducted?...

2. Name of leader ....

3. How many groups did he handle?..

4. How many men (Approx.) were in each group? ....

5. How many hours per day were spent in conference? ....

6. How did your foremen like the conferences? ....

7. Did foreman conferences lead to further educational work for foremen or for workers?

....

8. After the leader closed his series of conferences were foremen conferences continued by the company or foreman in an organized way? ....

9. Does the company consider the conferences worth while? ....

....

....

10. Can you cite any instances where there have been savings in operation due to conferences? ....

....

....

....

....

....

Remarks ....

....

....

....
(Signed)

....
(Position)