

The Premier Memorial Ishikawa Lecture
Dr. Kaoru Ishikawa Birth Centenary Commemoration
The Achievements and Personality of Dr. Kaoru Ishikawa

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1. Quiz for Prof Kaoru Ishikawa (originated by Acn Y. Ando, modified by N. Kano)

Q1: How Do You Know Prof. Kaoru Ishikawa?

A: *Father of TPS* B: *Father of TPM* C: *Father of QC Circles*

Q2: Which country Prof. Ishikawa visited the most?

A: *U. S.* B: *Switzerland* C: *Taiwan*

Q3: What Prof. Kaoru Ishikawa used to advise his students?

A: *Be Proficient in English* B: *Learn to Hold Your Drink* C: *Be Good with Data*

2. *English translation of the book:*

“Kaoru Ishikawa: The Man and Quality Control”,

Published by Mrs. Keiko Ishikawa in 1993, to that 172 writers including 144 writers from Japan and 28 writers from 15 other countries contributed. It is translated into English and is uploaded at: “Kaoru Ishikawa: The Man and Quality Control”,

<http://www.juse.or.jp/english/archives/>

3. My Personal Memory of Professor Ishikawa

Why did I Join Professor Ishikawa’s Research Group! : Why did I got selected to his group? No,

I did not select his group. It was the only group available because I was considered

“unpromising student.” My first option professor declined to accept me and only vacant seat available was in Prof. Ishikawa’s group. I was supervised by Prof Ishikawa for seven and a half years i.e. from the time I was a senior of the undergraduate course until I obtained the Doctorate degree.

Most Difficult Thing for a Professor: The most difficult thing for a professor is not to foster brilliant students but how well he/she vitalizes unpromising students and makes them understand their unknown capabilities to gain self-confidence. In this context Prof. Ishikawa had much patience and listened to his students carefully. I was very much endowed in this sense.

95% Problems in Genba Can Be Solved with Seven QC Tools: In summer in 1964 when I was a master course student, I was directed by Prof. Ishikawa, “Help me to translate the text into English for the special lecture which I am asked for the quality control symposium organized by APO.” I thought that Professor will talk about considerably high contents because the audience consisted of the representatives **from** each of the national productivity organization. But I was surprised to find QC Seven Tools for quality improvement at Genba in his Japanese text and it was impressive to find his conclusion that “95% problems in Genba can be solved with seven QC tools.” At that time, as I was convinced that high level of quality problems were solved with use of such a high level of statistical methods as ANOVA, Regression analysis, Experimental Design with use of orthogonal table, I was bewitched by a fox when I read his conclusion. It took nearly 10 years to fully understand it by repeatedly accompanying him and watching his consultation at Genba. He spared quite long time for understanding the essences of the problem and then he suggested the staff to select appropriate tools which were usually very simple tools..

How Many Girls Professor Interviewed before Encountering Keiko: In every January, he used to invite his students to his home for New Year home party, where he and his family heartily welcomed us. Once, after learning Prof. Ishikawa got married to Mrs. Keiko Ishikawa by arrangement, we asked the impolite question, “how many girls he interviewed for marriage before encountering her?”. He answered that her picture was the 52nd at his popularity with girls. Then I asked Keiko a rude question: “Would you like to say anything about this?” She answered calmly, “Kaoru’s picture came to me after the 52nd.” I thought that Kaoru lorded over Keiko. However, Keiko was probably a step ahead of Kaoru.

4. Achievements of Prof. Kaoru Ishikawa

The major achievements of Professor Kaoru Ishikawa are classified as follows:

a. Prof. Kaoru Ishikawa (1915-1989) is one of the pioneers who led the dissemination and promotion of TQM(Japanese way Quality Management) throughout each stage of the post-war reconstruction of Japan in the 1950s.

- b. Prof. Ishikawa invented Quality Control (QC) circles to promote humanity-centric management and Dr. Ishikawa is called “the father of QC Circles.”
- c. Throughout the time, as a professor of the University of Tokyo, **he** paid attention to the development of human resources in particular, graduating many outstanding disciples in the quality field among academics as well as quality practitioners in industry.
- d. Dr. Ishikawa was an inventor of the Cause & Effect Diagram (which is also known as the Fishbone Diagram or the Ishikawa Diagram).
- e. Dr. Ishikawa opened the door for overseas enterprises to challenge the Deming Prize.
- f. Dr. Ishikawa was one of the six founders of the International Academy for Quality (IAQ) and the International Conference on Quality Control (ICQC, today called the ICQ), and advanced many countries in quality.
- g. Dr. Ishikawa was invited to become the President of the Musashi Institute of Technology (currently Tokyo City University). He set an active example of Jishusei (self-initiative) and global outreach among the faculty members and students for eleven years.

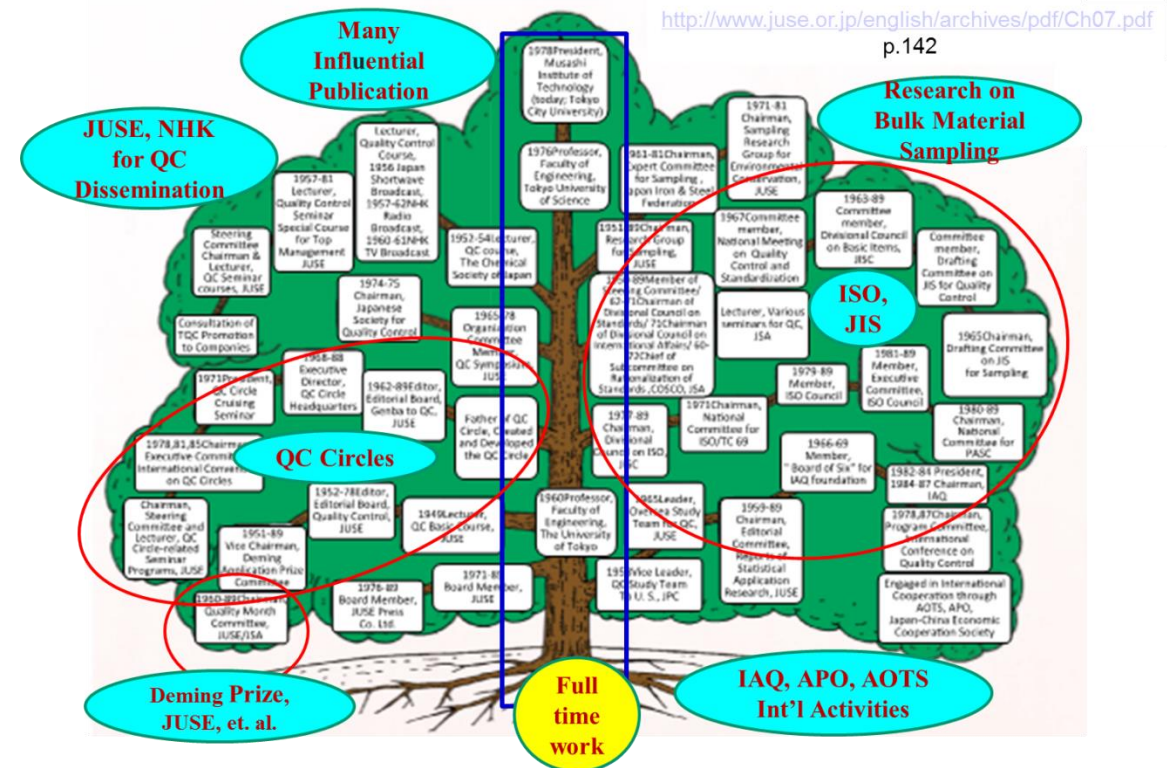


Fig. 1. The Tree of Prof. Kaoru Ishikawa (Drawn by Siro Ohatake)

h. Representative Books:

- **Publications:** 31 books, 647 articles, 74 Slides/Videos, and 62 JIS / 7 ISO Standard
- *Nihonteki Hinshitu Kanri* (Japanese-style Quality Control), JUSE Press, Ltd., 1981
[English] What Is Total Quality Control? The Japanese Way, Prentice Hall Inc., 1985
- *Nihonteki Hinshitu Kanri* (Japanese-style Quality Control), JUSE Press, Ltd., 1981
[English] What Is Total Quality Control? The Japanese Way, Prentice Hall Inc., 1985
Nihonteki Hinshitu Kanri (Japanese-style Quality Control), JUSE Press, Ltd., 1981
[English] What Is Total Quality Control? The Japanese Way, Prentice Hall Inc., 1985
- - QC Circle Koryo (QC Circle Platform), QC Circle Headquarters, JUSE, 1970
[English] QC Circle Koryo, General Principle of the QC Circle, QC Circle Headquarters, JUSE, 1980
 - Genba no QC Shuho (On-site QC Methods) JUSE Press, Ltd., 1968
 - [English] Guide to Quality Control (1st ed., 1974; rev. ed., 1976; 2nd rev. ed., 1982), Asian Productivity Organization
 - Hinshitu Kanri Nyumon (Introduction to Quality Control), JUSE, 1st ed. 1954; 2nd ed., 1964, 2nd ed., 1966, 3rd ed., 1989
 - [English] Introduction to Quality Control (3rd Edition), 3A Corporation, 1989
 - The major achievements of Professor Kaoru Ishikawa are illustrated as shown in Fig. 1.

Honors:

- 2010 Foundation of Ishikawa-Kano Award, Asian Network for Quality (ANQ)
- 1993: Foundation of the Ishikawa Medal, American Society for Quality Control
- 1990: Foundation of the QC Circle Kaoru Ishikawa Award, QC Circle Headquarters, JUSE
- 1988: The Order of Sacred Treasure, Gold and Silver Star, The Emperor of Japan
- 1986: Honorary Member, American Society for Quality Control
- 1983: Shewhart Medal, American Society for Quality Control
- 1952: Deming Prize for Individuals, Deming Prize Committee, JUSE

5. Ishikawa Philosophy from the viewpoint of QC Circles

From “What Is a QC Circle” and “~~and~~ “Basic Idea behind QC Circle Activities” at the JUSE website: <http://www.juse.or.jp/english/qc>, let us pick up the sentences which can

be easily understood from the view point of common sense for the business organization and administration .We can get the following text as Part A;

Part A:

- A QC Circle continually controls and improves the quality of their network, products and services.
- These small groups utilize quality control concepts and techniques and other improvement tools
- QC Circle activities aim to improve customer satisfaction and contribute to society,
- Executives and managers are personally practicing company-wide improvement activities such as TQM,

We can understand the Part A as necessary for improving QPS i.e. Quality of Products and Services and then contributes to company growth and profit.

And the rest is the following Part B:

- A QC Circle is a small group consisting of first-line employees.
- QC Circle activities aim to:
 - Develop members' capabilities and achieve self-actualization
 - Make the workplace more pleasant, vital and satisfying
- Treating QC Circle activities as an important part of employee development and workplace vitalization, and providing guidance and support for total participation while respecting the humanity of all employees.
- Executives and managers to ensure that QC Circle activities contribute to improving the health of the enterprise.

The Part B intends to develop QWL as Quality of Working Life. I believe that Professor Ishikawa should have thought that Part A is continually implemented to achieved QPS but it is so difficult to do so and then he found it is necessary to continually realize QWL in order to maintain and develop QPS. Professor Ishikawa illustrated this by Fig. 2.

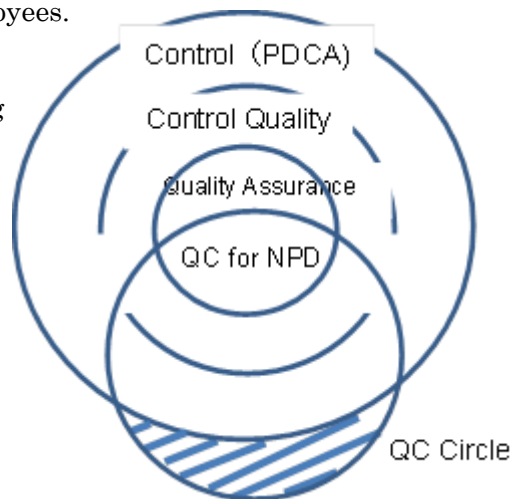


Fig. 2. TQM
(Company-wide Quality)