

Employee Education and Training System at JR East

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Introduction

On 31 March 1987, Japanese National Railways ended its central role in Japanese transportation with a rebirth by privatization as six regional passenger railway companies (JRs) and a nationwide freight company (JR Freight). JR East, the largest of the six JRs, serves a vast area extending from Tokyo to the northern tip of Honshu with about 7500 km of line and carrying 16.64 million passengers per day.

Although there were some initial concerns about the company's financial viability, it has been reporting average annual profits of ¥100 billion during the last 10 years of operation.

Human Resources Development

As a private company, JR East must maintain sound management with accountability, based on a flexible organizational structure and corporate culture, while empowering operational structures dealing with customers and handling day-to-day work.

To encourage development of employees who are expected to be innovative regardless of the nature and scale of their work, we must focus on how we should empower and motivate them. JR East has a well-established mechanism supporting employees' voluntary self-improvement activities, including various training programmes.

Providing safe and comfortable travel for 16.64 million passengers each day must start from ensuring that customers enjoy a pleasant journey. JR East employees meet customers in many places and situations—at the ticket counter and gate, on the platform, and in trains. Our employees' dress, behaviour and response when dealing with customers, greatly affect the customers' impression of JR East, and can



New employees planting trees to commemorate joining company

(JR East)

actually make or break confidence in the company. During the JNR era, common polite expressions like 'Welcome on board.' and 'Thank you.' or even the word 'customer' were not part of the business vocabulary.

As a result, the first priority for JR East was to improve service quality through improved customer service. And even today, employee education about customer service is a main priority.

JR East employs about 80,000 people in a wide range of operations, including our core railway business consisting of sales, train operations, management of facilities, and other businesses. In particular, track maintenance has seen major changes due to the company's aggressive investment in modernization and upgrading. These changes incorporate advanced technology requiring new knowledge and skills. Although resources to provide employee training in a variety of areas were in demand, restructuring mandated by the JNR privatization resulted in the closure of 9 training facilities managed by JR East, leaving just two. Since these closures, the company has been building new facili-

ties for employee training programmes and has added extra resources to the two facilities that were not closed. Nevertheless, due to the healthy company growth, the need for employee training and education has outstripped the existing resources.

Furthermore, since JNR and JR East did not hire any new non-management employees for railway operations between 1982 and 1991, JR East's organizational structure is now characterized by a very small number of young employees. This presents problems in terms of handing-down technical skills, and encouraging employee initiative.

Since 1991, JR East has started employing more than 1000 new people each year, making their education and training a major challenge.

This article briefly describes the company's basic policy on development of human resources, training programmes, and the current track record. It also discusses selected training programmes for young employees, promoted employees, job unit empowerment, and train operation safety.

Basic Policy

JR East's internal regulations on education and training state that, 'In recognition that the enthusiasm and passion of each employee plays a major role in the Company's future, the Company will provide educational opportunities for employees to improve their knowledge, skills and job motivation, so that they can accomplish the Company's objectives.'

In short, JR East aims to develop employees who can work on their own initiative to contribute to local society and create a richer culture. To accomplish these objectives, the company has established the following policies:

- An important duty of managers is to help development of subordinates by establishing clearly planned and focused objectives.
- The company will support every employee who makes an enthusiastic and voluntary effort at self-development.
- The company will provide education and training for employees with sufficient capability and aptitude.

In other words, JR East provides education and training according to the employee's ability and other attributes using on-the-job training (OJT) by supervisors, and by assisting the employee's own self-development efforts.

Education and Training

Education and training system

As mentioned earlier, the backbone of JR East's education and training lies in OJT by supervisors and managers. However, collective training provided at training centres and in other forms covers a wide range of areas, including training of OJT supervisors, improvement of job-related knowledge and skills, understanding of management challenges and objectives, understanding of roles of individual work-



New conductors receiving instruction

(JR East)



Using simulators to train new drivers

(JR East)

ers by rank and position, and leadership development.

JR East has two major training institutes, the Central (Tokyo) and Sendai Training Centres, each accommodating 700 people. There are also smaller training facilities at JR East's nine regional branches, including comprehensive safety training centres which provide safety education using simulators for personnel in train operation (drivers, conductors, station staff), and sales training centres which teach the operation of reservation and ticketing equipment, product knowledge and sales methods to sales staff. In addition, outside training, including university education and overseas training, is used to provide knowledge and techniques not taught internally (Fig. 1).

A correspondence training programme uses course materials developed by JR East and is designed to upgrade job-related knowledge in order to support the employee's self-development efforts. There are 31 correspondence courses at present, but the programme is being updated and will expand to 41 courses. Employees pay minimum fees for each course.

The company also offers a further 118 courses provided by outside educational organizations, mainly consisting of preparing for professional licenses, learning foreign languages, and operating computer and office equipment. The company pays half the tuition cost at course completion.

Training record

In 1996, JR East conducted education and training courses for 123,000 persons totalling 310,000 person-days. This is equivalent to 1.5 courses per employee annually, each course lasting 2.5 days. The next section briefly explains the collective training system, with the focus on the Central Training Centre. Basically the training is divided into three types: Rank-oriented, Function-oriented, and Job unit empowerment (Fig. 2).

Figure 1 Education and Training System

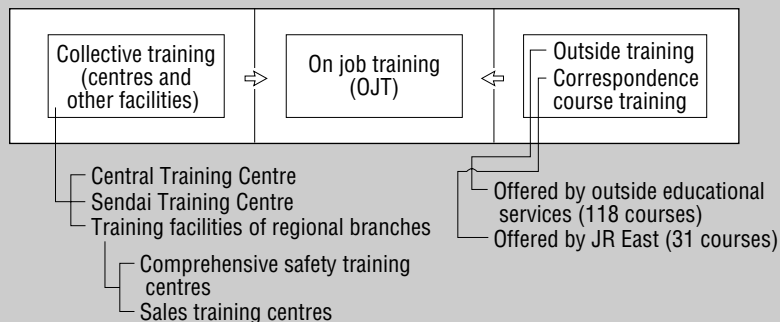
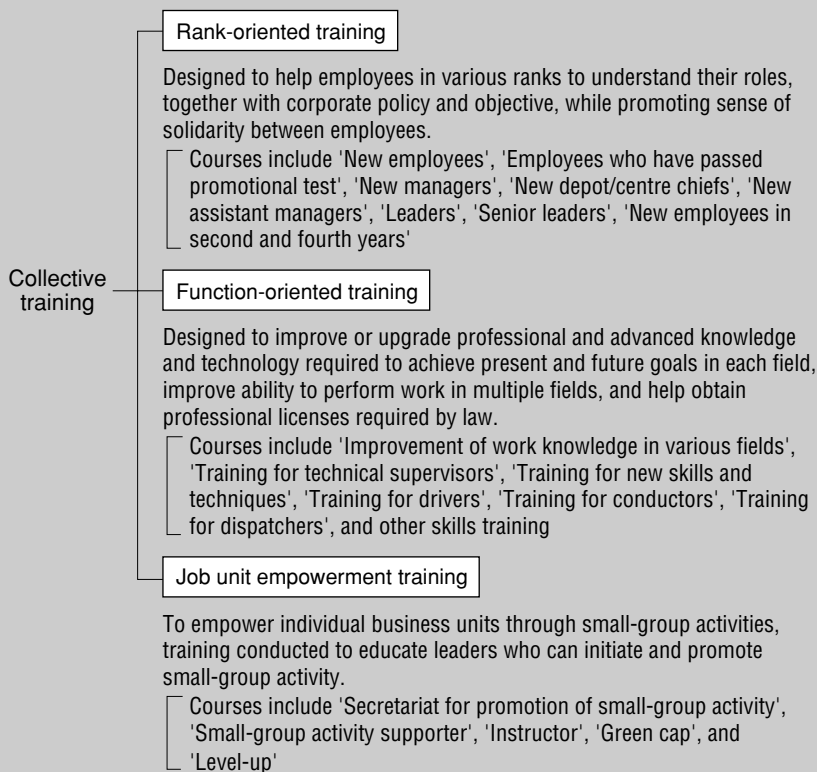


Figure 2 Three Training Types



Education of Junior Operations Staff

Educational opportunities for junior operations staff are illustrated in Fig. 3.

The programme consists of follow-up education for employees in their second and fourth years of employment.

JR East started long-awaited employment of high school graduates in 1991 and has been strengthening the collective training courses for junior employees, together with more focused OJT to develop juniors into the backbone of the company. In 1995, a scholarship programme was introduced in cooperation with Tokai University and Tokyo Denki (Electrical Engineering) University. We are now emphasizing brush-up training and leader training as integral parts of the junior staff training programme.

Brush-up training

Brush-up training (Fig. 4) is provided for all fourth-year employees. They spend 3 days at a training centre and are organized into classes of 24 based on job description. Each class is taught by a chief instructor and three advisors who are managers with long-term experience. Trainees present case studies, conduct discussions, and receive advice. Furthermore, their superiors are encouraged to participate to improve mutual understanding because shift restrictions limit time for on-the-job communications.

Trainees' comments after brush-up training indicate that the course generally produces the intended results.

Leader training

JR East believes that leaders are essential in unleashing organizational vitality and should be found at every job level. The leader training course (Table 1) was inaugurated in January 1997 and is designed to develop leaders who can inspire their co-workers and subordinates, and who will be the backbone of the company in

Figure 3 Model Career Path for Junior Employees (Conductor/Driver)

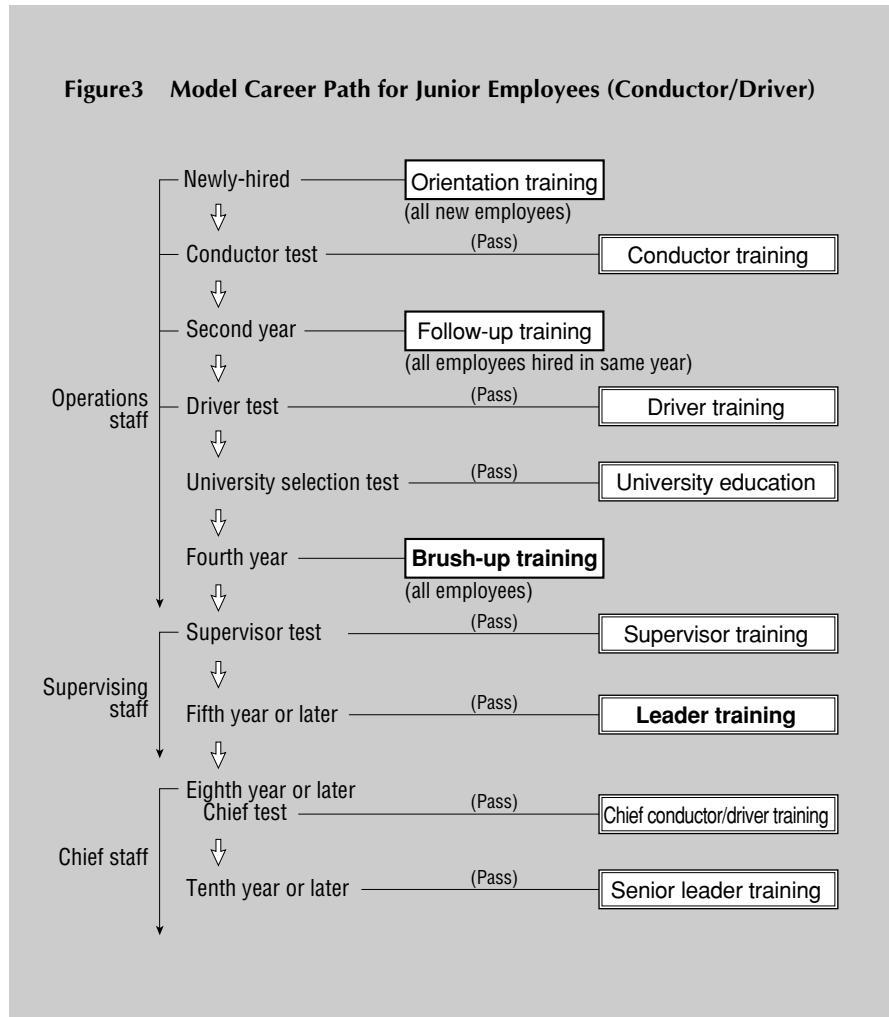


Figure 4 Brush-up Training

Brush-up Training (21 hours)

(1) Identifying theme	1 hour
(2) Awareness of role (discussion)	3 hours
(3) Trouble handling (case study)	8 hours
(4) Physical training	1 hour
(5) Creating pleasant working environment (discussion)	5 hours
(6) Setting activity goals (personal work)	3 hour

Table 1 Leader Training (1997)

Category	Duration	Course content (276 hours)
Special lectures	10	Lectures by senior executives and outside lecturers
Current situation analysis	4	Current business status and issues, and significance of privatization
General studies	88	Law and society, Japanese economy, labour-management relations, work regulations, financial statements, latest technology, 'PowerPoint' training, English conversation skills, major social trends, writing skills, creative thinking, physical and mental health, and human rights
Work knowledge	74	Service basics, safety management, outline of major business units, concept of customer satisfaction, train operation and system, information network theory, problem solving in day-to-day work, and work improvement methods
Development of teamwork/leadership	42	Teamwork building, presentation techniques, and volunteer activities
Perspective enhancement	58	Foreign tour, case study

the future.

It is interesting to note that this course evolved from intensive discussions on education of junior employees between the management and union. It is one of the two most important courses in JR East's rank-oriented training—the other is the training course for senior leaders.

Its importance is reflected in the course duration (276 hours) which is second only to training of train drivers. The course starts with a lecture by a senior executive and covers a wide range of topics including current issues, general economy, and work knowledge.

In particular, the course emphasizes various leadership training, including group study of trainee-selected issues. In addition, there is a 1-week field trip including a factory tour and lecture in Singapore or Hong Kong to gain a global perspective. Entrance to the course is highly competi-

tive with acceptance of only 1-in-7 applicants. To be eligible to apply, an employee must have reached the supervising rank, have reached the rank of instructor, be less than 30 years old, and

have passed the leader training selection test. Each course has 100 trainees, divided into three classes. Trainees live in a dormitory during the course to encourage mutual understanding and friendship.

The other leader training course is for senior leaders in their 30s (chief rank) who have passed a selection test. It lasts 3 months and is attended by 100 trainees.

Training for Promoted Employees

JR East holds tests to promote employees through job ranks as follows: Operations staff (conductor/driver) → Supervising staff (senior conductor/driver) → Chief operations staff (chief conductor/driver) → Assistant centre/depot chiefs → Centre/depot chiefs. Employees passing these promotion tests must attend collective training, where they are expected to learn and understand the current state of the company, the roles expected for each job rank, and knowhow concerning job unit empowerment and work improvement (Table 2).

Each year, around 5000 employees pass the promotion tests and attend the training, which constitutes a key element in the rank-oriented training programme and serves as a central force in the company's basic policy outlined above. The train-

Table 2 Contents of 3-Day Training Course for Promoted Employees

	Morning	Afternoon
First day	- Roles of chief staff	- Team work: game-style workshop - Understanding roles: case study
Second day	- Work planning and coordination: case study	- Improvement of communication skills: game-style workshop - Guidance and teaching for junior workers: case study
Third day	- Job unit empowerment: case study - Role of small-group activity leader	- Self-development: case study - Preparation of personal goals: personal work

ing period is 3 days, and participants live together in the training facilities to promote deeper mutual understanding.

Job Unit Empowerment Training

Active employee participation in improvement initiatives is a major source of corporate vitality. JR East believes that small groups are the optimum tool for delivering team work and creativity, and for empowering individual business units. The company's small-group activities are comprised of voluntary self-help efforts by employees supported by company resources. In 1996, there were 5700 registered small groups with 45,600 members, comprising 67% of all employees.

Examples of small-group activities are listed below:

- Training circle members to promote better understanding of small group activity methods
- Training business managers to support small group activities
- Training secretariats to support small group activities
- Holding national conferences to report results of small group activities
- Funding (up to ¥3000 per member per month)
- Providing small financial incentives to groups achieving their objectives
- Publishing case studies
- Publishing monthly magazine on small group activities (121 issues since 1987)
- Reflecting activity and achievements in performance evaluations and bonus payments

Overall, the company focuses on training members and leaders of small groups (Fig. 5), their managers (supporters), and promotional organizations (secretariat). The success of small-group activity depends upon education of employees including dissemination of information right from the start.

In the last 10 years, about 25,000 employ-



Comprehensive Safety Training Centre in Higashi-Omiya near Tokyo

(JR East)



Setting warning flares and track jumper cable to stop oncoming train in emergency

(JR East)



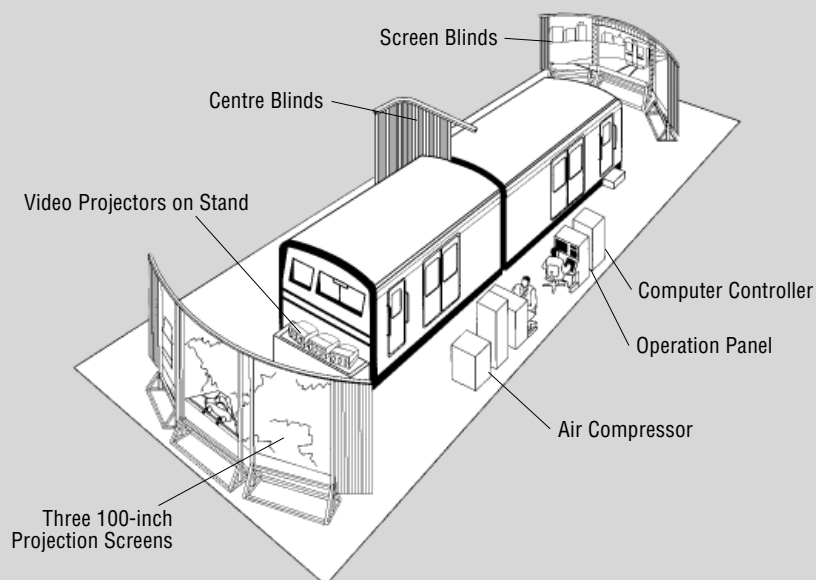
Train fire extinguishing drill

(JR East)

Figure 5 General Outline of Course for Small-Group Leaders

(1) Self-introduction, and circle's current activity	2 hours	} 22 hours (2 nights)
(2) Confirmation of basic items	2 hours	
(3) Major points in QC story and methodology	10 hours	
(4) Field practice	2 hours	
(5) Learning from success stories	2 hours	
(6) Future outlook for small-group activity and suggestion activity	4 hour	

Figure 6 Train Emergency Simulator



View in emergency simulator driver's cab

(JR East)

ees have received training related to small-group activity organized by head office, which accounts for 30% of the total. In the process, small-group activities have generated a large number of suggestions and have had a positive impact on the conventional employee suggestion programme. For example, in 1995, around 558,000 suggestions (8.3 per employee) were made.

JR East's small-group activities have made excellent progress and have even won a major prize at a national competition sponsored by an outside educational organization.

The company considers the voluntary, innovative efforts and achievements of these small-group activities to be an important asset, and intends to reinforce such activities.

Safety Education

In JR East's second year of operation, a serious train collision on 3 December 1988 near Higashi-Nakano Station injured many passengers.

The company made a concerted effort to identify the cause of the accident and to devise safety improvement measures. One recommendation of the special committee was to provide better and more unified safety education for employees involved in train operation.

Previously, the company's safety education relied heavily on OJT, and there was no unified training programme for the various jobs in train operations. Consequently, safety education had been left in the hands of each operational unit.

It was decided to replace the OJT-based safety training with collective periodic training by establishing a formal training system focused on basic operation and emergency procedures.

Nine comprehensive safety training centres were established for this purpose, in addition to the Central and Sendai Train-

ing Centres. Seventy instructors were trained and the nine centres started operation in 1989. When employees are first appointed to train operations, they receive initial training at the Central Training Centre, with follow-up training every other year at the comprehensive safety training centres. The training programme is intended to serve about 20,000 employees in total, including train drivers, conductors, station staff, maintenance staff, train dispatchers, and power-supply controllers, etc. About 11,000 people attend the programme annually.

To ensure that train operations staff experience actual safety and emergency procedures, JR East developed a simulator using a real car (Fig. 6). The software simulates 52 abnormalities to train staff to cope with a variety of emergencies. Station staff are trained using a simulated station yard including relay interlocks with a monitoring system. In addition, there are also simulators for train and power-supply controllers.

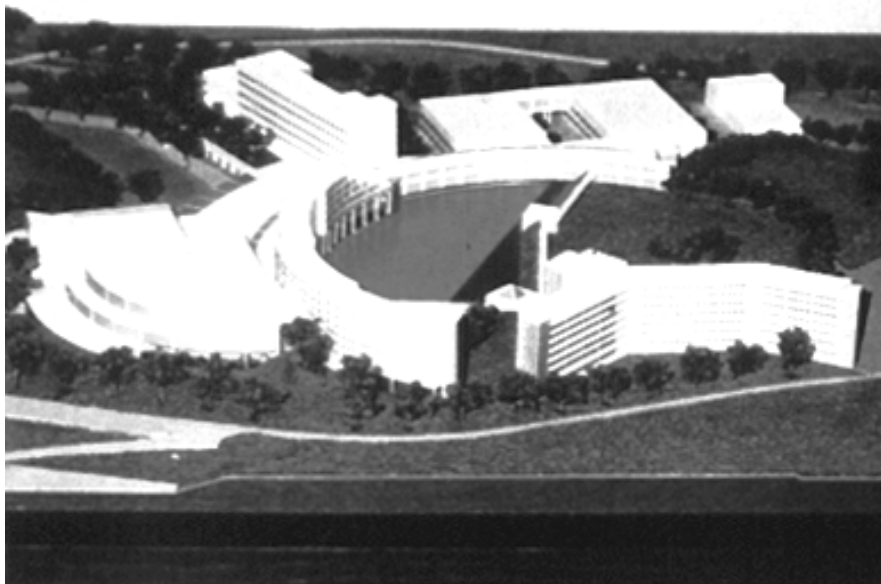
The average training period is 16 hours, depending upon job description. Training results including data are published and used as the basis of day-to-day field guidance.

The programme is now in its ninth year and every member of the JR East's train operations staff has attended four times so far. In addition, train drivers and conductors continue to receive OJT.

Conclusion

As the company diversifies into increasingly sophisticated business fields, the need for employee education is on the rise. To meet this need, JR East is building a new training facility in Shirakawa, 200 km north of Tokyo, slated to open in January 2000.

In the meantime, the content is diversifying from one-way, lecture-based training to participatory, discussion-oriented and



Design concept of new training facility in Shirakawa

(JR East)

practical training. Course materials have undergone a quantum leap in quality using computers and sophisticated presentation techniques including animation. As a result, the training environment has changed dramatically.

In the future, training staff will be expected to use computers and other resources to customize training to each employee's knowledge and skill levels. Moreover, OJT and formal training will be shared through information networks.

The company intends to entirely redesign its training system including course materials when the new training facility opens to achieve pro-active development of human resources. ■



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