



A CASE STUDY OF THE NEW JERSEY TRANSIT RAIL OPERATIONS TRAINING DEPARTMENT



New Jersey Transit Rail Operations Training Department

SUMMARY

NJ Transit Rail partnered with EDSI to develop a customized 3-day train-the-trainer program to provide essential knowledge and practical skills needed to more effectively facilitate trainings for adult learners.

A total of 31 trainers from the **NJ Transit Rail Operations** attended the session. The participants included new hire conductor and engineer training staff as well as staff responsible for facilitating special project training, refresher training, welding certification and rail maintenance training.

OUTCOMES/ROI

End-of-Training Evaluation

A comprehensive, formal **end-of-training evaluation** was used at the conclusion of the third day of the **train-the-trainer**. The end of training evaluation used a 4-point Likert scale and asked trainees to rate a series of statements from strongly agree (4) to strongly disagree (1). The statements focused on the efficacy of the facilitator, the content relevancy and how the much the materials and location contributed to the trainee's learning. Trainees were also asked to rate how effective the training was in meeting the stated learning objectives.

Overall, **train-the-trainer participants** overwhelmingly agreed that the training increased their comfort in planning and delivering a dynamic and engaging training (3.88). The participants most strongly agreed that the presenter was knowledgeable about the subject (3.92), opportunities were offered during the training to effectively practice or apply the concepts/skills covered (3.88) and the training activities facilitated the sharing of ideas and work experiences among trainees (3.88). On average, participants felt the **train-the-trainer** increased their knowledge and understanding of adult learning & active learning concepts and application (3.85), learning styles and multi-modal instruction (3.85) and training facilitation best practices and techniques (3.81). Trainees had extremely positive comments about their **train-the-trainer** experience.

Skilldex Gains - Knowledge Acquisition and Confidence

Overall, the average score from the pre-training assessment to the post-training assessment was improved. According to the **Skilldex**® pre- and post- training assessment, participants of the train-the-trainer program made a **55% average gain** in overall knowledge and skills. The average score for participants before attending the train-the-trainer was **1.81**- participants knew about the responsibilities and tasks but did not feel comfortable performing them on their own. After the training, **participants' average rating increased to 3.35**. That means on average, after attending the **train-the-trainer** program, most participants felt confident that either they could perform the task on their own or they were able to instruct others to perform the task.



Source: NJ Transit train. [Digital Image]. (2019)

Retrieved from: <https://jerseydigs.com/new-jersey-transit-begins-trans-hudson-contingency-planning/>

skilldex®



skillexsolutions.com

Skilldex is a web application designed to better engage regional employers and provide innovative service for local jobseekers and current employees. With Skilldex, you have the ability to collect, analyze and act on individual and regional skills data like never before.

Skill Assessment Using skilldex

The first step of the training process was to assess NJ Transit trainers' current knowledge and skill level. Using **EDSI's web-based system, Skilldex**, **NJ Transit training staff** took a comprehensive pre-training assessment. Participants in the assessment were asked to self-report their current knowledge and skill level on a number of responsibilities and tasks required to develop and facilitate trainings effectively. Using the data from this assessment, **EDSI** was able to pinpoint the trainers' current strengths and identify areas to target for professional development.

These were the responsibilities included on the assessment:

- Demonstrating knowledge of Adult and Active Learning Principles
- Providing effective feedback
- Increasing trainee engagement through the use of effective questions
- Integrating multi-modal instructional practices
- Creating a motivational learning environment
- Planning effective training experiences
- Writing learning objectives
- Identifying appropriate instructional strategies
- Developing hands-on interactive training activities
- Presenting and facilitating to meet training goals



Source: NJ Transit trains. [Digital Image]. (2019)

Retrieved from: <https://www.nj.com/traffic/2019/05/it-wont-be-the-summer-of-hell-again-for-nj-transit-riders-but-heres-how-track-work-will-affect-your-commute.html>

Skilldex uses a Likert scale that asks participants to evaluate their comfort and proficiency in completing required tasks. The rating system ranges from not being aware of a specific task (0) to being able to instruct others performing in this task (4). **NJ Transit Rail trainers**, on average, rated their skill level between being aware of tasks but unable to perform them (1) and being able to perform the task with assistance (2). According to the pre-training assessment, they felt least confident implementing learning styles and multi-modal instruction. They felt most comfortable developing appropriate activities that contribute to learner understanding.

The same **Skilldex** assessment was also used post-training to measure training participants' knowledge and skill acquisition in areas critical to effective training development and facilitation. Both pre- and post-training **Skilldex** survey assessments were anonymous and collected electronically.

3-Day Train-the-Trainer Program

The **3-day train-the-trainer program** was *interactive, hands-on* and *experiential*. All information provided was rooted in applying content to enhance training effectiveness in participants' own classrooms. The training topics included in the **3-day training** focused on providing both foundational information about adult learning and learning styles and tools to improve training facilitation. Trainers also had an opportunity to learn and practice strategies to develop training experiences that they could implement immediately with their current new hire trainees.

The training topics included in the 3-day train-the-trainer session included:

- Adult and Active Learning
- Providing Feedback
- Trainee Engagement and Effective Questioning Techniques
- Learning Styles
- Creating a Motivational Environment
- ADDIE Framework for Developing Training (Analyze, Design, Develop, Implement, Evaluate)
- Writing Learning Objectives
- Presentation and Facilitation Best Practices



In the **3-day train-the-trainer session**, participants worked in groups to revise a current training module using the **ADDIE Model**. They worked together to re-envision their existing training by applying adult learning best practices, crafting effective reflection and discussion questions, and designing engaging activities. Each group then presented a short portion of their training to their colleagues. They had the opportunity to give and receive feedback, which helped build an important feeling of collaboration amongst the training staff.

One-on-One Coaching (Post-Training)

Coaching is one of the most effective ways to ensure professional development has a real impact on changing staff's behavior to increase the transfer of knowledge. After the training, it was very effective to have trainees participate in a **one-on-one coaching session**. This hour-long session addressed participant questions and discussed successes and challenges that the participants faced when implementing and applying concepts covered in the 3-day training seminar.

ISSUES

NJ Transit Rail Operations' new hire training program for engineers and conductors is quite rigorous and challenging. There was a huge push to increase hiring for these positions and ensure safe, reliable service as many new hires were not making it through the training program because of the inability to pass the exams. Recruiting and training new hires is time-consuming and expensive. New hires not completing the training or leaving the organization in the first year increases the burden on the current staff to meet the organization's needs. Adding to the challenges, many of **NJ Transit's** experienced instructors had recently retired, which created opportunities for technically skilled employees to move into training, with little or no experience, affecting the quality and consistency of training delivery.

TESTIMONIALS

- Very informative training!
- The two trainers were aware of our unique requirements and kept the class well-paced and engaged.
- I truly did learn a great deal. You opened my eyes to new training I hope to use in our class.
- Instructors were clear, concise and professional in every way- we benefited greatly by observing them.
- Thank you for an enjoyable class. Very informative and I think participants will be willing and able to apply concepts.
- I really enjoyed this training session.
- Very beneficial.



Source: NJ Transit conductor [Digital Image]. (2016)
Retrieved from: <https://www.crainsnewyork.com/article/20160308/TRANSPORTATION/160309859/nj-transit-rail-unions-closer-to-contract-deal>

LET'S CONNECT

We'd love to hear from you. Whether your company needs help with staff training, organizational change management, talent development or knowledge management, we are here for you.



info@EDSIsolutions.com



Learn more about EDSI

ABOUT US

As a national consulting and workforce development company, **Educational Data Systems, Inc. (EDSI)** works with many industries from manufacturing to transit. In fact, **EDSI** has worked with more than **50 transit agencies** in the United States since its inception in 1979.



EDSIsolutions.com