Purpose and Methodology. In 2006, the Training Alignment Team (TAT) sponsored a survey to understand which training delivery methods are experienced as most effective for learning by MIT employees. Administrative, sponsored research, and support staff were surveyed because they predominate as participants in MIT training programs. The overall goal in gathering these data is to ensure that choice of delivery methods optimizes learning for work at MIT. The Training Delivery Methods project team included members from four different departments who develop and deliver training at MIT.

In the survey, respondents were asked to rate the effectiveness of seven training delivery methods. Respondents were also asked to rate their level of experience as well as the effectiveness of the delivery methods for several subject matter areas. Finally, respondents were asked to provide written comments regarding their choices.

The methods were chosen by a set of criteria that included current usage, survey brevity, and commonality of language across departments. These seven methods include:

- Lecture/demonstration
- Classroom training with instructor
- One-on-one tutorial
- Self-paced learning, non-electronic
- E-learning, self-paced
- E-learning, facilitated
- Blended learning.

The survey was sent in two stages in 2006 to a randomly selected sample of 1882 MIT employees including administrative staff, support staff, and sponsored research staff. The overall response rate was 26% (492 respondents). Respondents included 41.7% men and 58.3% women. Respondents were representative of those sampled. For relevant analyses, results are significant at a 95% confidence level.

Key Findings. (For additional results and data, please see the full survey report.)

- “Classroom training with instructor” was chosen more often than any other method as “most effective for learning.” This method was rated highest overall and 30% higher than the next highest rated method. “Classroom training with instructor” was also rated highest on three (computing/software skills, financial/accounting skills, interpersonal communication/leadership skills) of the four subject matter areas.
- For learning about “a procedural or policy change,” the fourth subject area, “lecture/demonstration” was seen as most effective. Written responses suggest that the efficiency of “lecture/demonstration” to learn something brief may explain this choice. Both “classroom with instructor” and “e-learning self-paced” followed as second most effective for this subject matter.
- All seven methods were rated as effective for learning at a level 3 or higher (1-5 scale), suggesting respondents learn effectively with all methods.
- Of the seven methods, “e-learning, facilitated” was generally, though not always, rated least effective. Respondents’ written comments suggest an explanation.
That is, live interaction was a key variable in respondents’ choosing “classroom training,” and the ability to go at one’s own pace was important in their choice of the “self-paced” methods. “E-learning, facilitated” employs none of these key factors seen as effective for learning by respondents.

- There were no practically significant differences by gender between the administrative and support staff groups.
- Differences suggest that sponsored research staff have more experience with “e-learning self-paced” than the other groups and are more likely to choose it as most effective. However, even among the sponsored research staff, “classroom with an instructor” was rated highest more often than any other method.
- Women sponsored research staff with “e-learning, self-paced” experience were more likely than other groups (including men sponsored research staff) to choose “e-learning self-paced” as most effective.
- Nearly 80% of respondents (391 of 492) provided written comments. These qualitative results fully support quantitative findings. Reasons why employees chose certain methods as most effective include:
  - Asking questions (26%). Generally associated with “classroom training with an instructor.”
  - Synergy/Learning with others (15%). Primarily associated with “classroom training.”
  - Interaction with a human instructor (12%). Associated with “classroom,” “blended learning,” “one-on-one tutorial,” and “lecture/demonstration.”
  - Choosing one’s own pace (12%). Primarily “e-learning, self-paced”.
  - Learning by doing (10%). “Classroom” and “one-on-one tutorial”.

**Conclusion.** These data suggest respondents believe they can learn effectively with all seven training delivery methods surveyed. Nonetheless, clear preferences for specific methods were made by respondents when given a choice.

Most MIT employees appear to choose live classroom training with an instructor as most effective for their learning. In a classroom environment, the ability to ask questions and interact with others are seen as key components for participants’ learning. Key factors for other, self-paced methods include learning at one’s own pace and the ability to choose time and place. Few respondents choose other methods (e.g., “e-learning, facilitated”) because these methods offer neither the human interaction nor the choice of pace, place, and time.

While these data suggest some significant differences among staff regarding their choice of methods, “classroom training with an instructor” was seen as most effective by most groups and across most subject matter areas.

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