

Are learning gains and retention improved by sending periodic email messages to learners after completion of mandatory online training?

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Abstract

This paper proposes a study to measure the impact on learning gains and retention resulting from targeted reminder and refresher email messages being sent to retail sales employees after they complete mandatory online training on new products. While many companies have adopted online training methods for their employees, the training is frequently treated as a singular event, a task to be done once and then marked as complete. The opportunity exists to deliver periodic messages via email to employees after they have completed the online training. The purpose of these follow-up messages would be to remind the employees of key messages and main themes of the recently completed training, with the desired outcome being measurable improvements in learning gains and measurable improvements in the retention of new knowledge gained. Online assessments would be used to measure learning gain and retention for employees receiving emails and also for a control group.

Running head: ARE LEARNING GAINS AND RETENTION IMPROVED BY EMAILS

Companies invest great sums of money in training their employees and the goal is to achieve a return on that investment through improved performance on the job (Daniels, 2003). One of the major problems in achieving this return is that much of what employees learn in training is soon forgotten as depicted below in Figure 1 depicting what is known as the “forgetting curve” (Thalheimer, 2006).

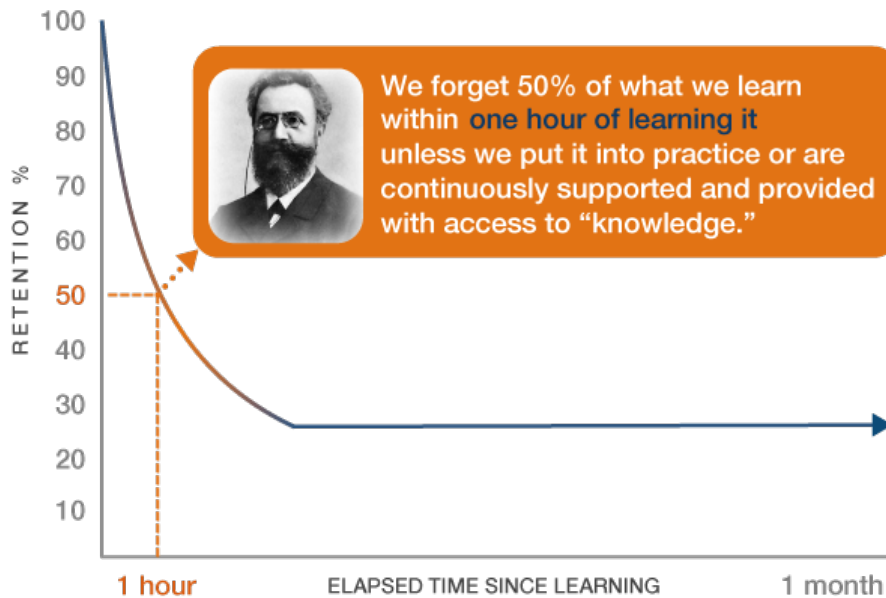


Figure 1. The Forgetting Curve

A specialized learning technique known as the “spacing effect” can help employees retain information better. Follow-up emails proposed in this study are an example of spacing out the learning experience by delivering messages of reinforcement and reminders of key points that were recently covered in training. Proper spacing can impact the forgetting curve favorably as shown in the graph in Figure 2 on the following page.

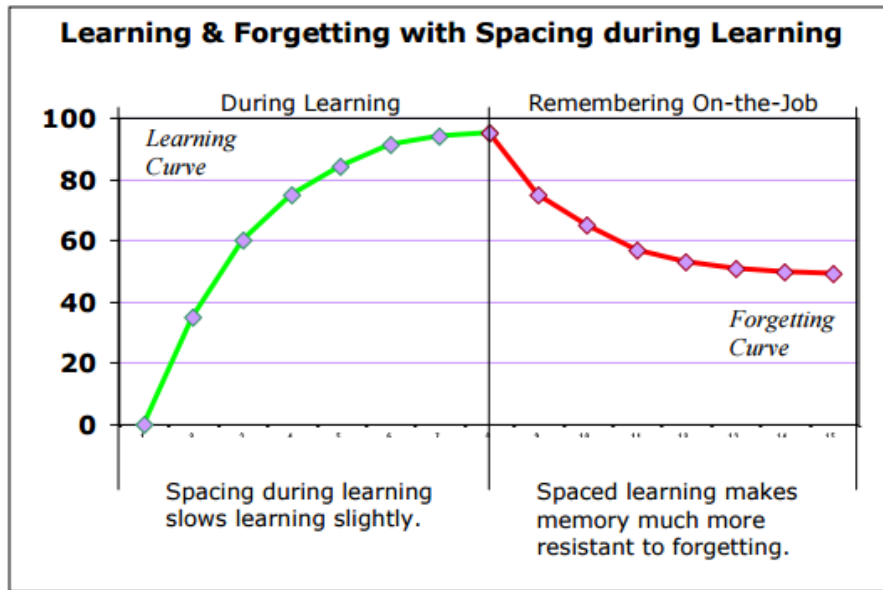


Figure 2. Impact of spacing effect on learning

Review of the Literature

Some of the literature that focuses on email communication between instructor and students focuses on communication before class begins to increase enrollment and participation (Woods 2002). There does not seem to be any study exhaustively exploring the hypothesis put forth in this research proposal.

Significance of the Study

Any opportunity to impact the forgetting curve has the potential to be a significant improvement in the learning methodology. This study will be significant because it will specifically examine the potential to improve retention through the use of easily available low-cost messages through standard email systems.

Research Questions or Hypothesis

This study seeks to answer the following question: Are learning gains and retention improved by sending periodic email messages to learners after completion of mandatory online training?

Method is Quantitative

This study would be quantitative in nature. It seeks to measure specific impact on learning gains and retention of interventions using email technology.

Procedures

The study would be split into two groups: one would receive a series of 3 email messages sent one each week for three weeks beginning 7 days after completion of training. The control group would receive no follow-up messages. All messages would be sent through the company email system with read receipt confirmation.

Independent Variables

The independent variables in this study are the assessment results as measured immediately after initial training was completed.

Dependent Variables

The dependent variables in this study would be test scores on assessments given four weeks after the completion of the original online training course. Scores on these assessments would indicate knowledge gained from the original training and retained. The same assessments would be given to subjects who received the email interventions and those in the control group who did not.

Sample

The study population would be retail sales employees of a single company. The initial online training would be about new products available for them sell. The goal would be to enlist 50 people in the target group and 50 people in the control group. Study subjects would have the same job responsibilities and be expected to sell the same products to their customers.

Data Collection

Data collected would be assessment test scores immediately after training for all participants and then again 28 days later for all participants.

Data Analysis Procedures

Data analysis would include completion rates for online training, measurement of email delivery success rates, and a comparison of assessments scores between the target and control groups to measure the impact on learning gains and retention of the email message intervention.

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