



## Making Safety and Health Training Materials More Effective

### Designing Occupational Safety and Health Training Materials for Clear Communication

Clayton Sinyai, Grace Barlet. *Journal of Occupational and Environmental Medicine*, 2020.

#### Overview

Written materials remain a building block for occupational safety and health training programs, with a recent survey of construction safety professionals and trainers finding that nearly three out of four had used handouts or brochures during the previous month. However, written materials are effective only if the audience understands them, and developing content for the construction industry can be especially challenging because its workforce has a broad range of literacy skills. Public health professionals at the Centers for Disease Control and Prevention have created a Clear Communication Index (CCI) to guide the design of health education materials for the general public. This study used the CCI to revise an existing handout on heat exposure hazards in construction, assessing whether the new version was more comprehensible than the old version with an audience of 425 construction apprentices and journey-level workers

#### Key Findings

- Overall, despite a large difference in Clear Communication Index (CCI) scores, the handout revised using the CCI only modestly outperformed the original.
- Some features recommended by the CCI, such as the use of subheadings, numbering and other visual cues—strongly conditioned the readers' understanding of the main message.
- Readers who received the handout revised by the CCI were far more likely to mention the specific actions one could take to prevent heat exhaustion or heat stroke.
- Supplemented by testing with members of the intended audience, the CCI can be a useful resource for preparing written occupational safety and health training materials.

#### For more information, contact:

Clayton Sinyai: [clayton@sinyai.org](mailto:clayton@sinyai.org)

#### See abstract:

<https://bit.ly/2FWebF6>

©2020, CPWR-The Center for Construction Research and Training. All rights reserved. CPWR is the research and training arm of NABTU. Production of this document was supported by cooperative agreement OH 009762 from the National Institute for Occupational Safety and Health (NIOSH). The contents are solely the responsibility of the authors and do not necessarily represent the official views of NIOSH.



THE CENTER FOR CONSTRUCTION  
RESEARCH AND TRAINING

[WWW.CPWR.COM](http://WWW.CPWR.COM)