Disciplinary Reading Practices of Medical Laboratory Science

CHRISTINA G. CAMILLO

ABSTRACT

Disciplinary literacy considers the unique ways in which experts in a field read, write, and communicate, although these practices are often implicit. Theorists believe that students who are taught the literacy practices of a discipline are better able to engage with the material and are motivated to learn. By making the tacit reading practices of medical laboratory science (MLS) explicit, educators can better prepare students for expectations in the profession. To identify the unique reading practices of MLS, the consensus-building research method known as the Delphi method was used. A panel of MLS experts was assembled and presented with a series of questionnaires. The first questionnaire asked an open-ended question that invited the experts to identify the reading or to interpret practices that are characteristic of MLS. Responses were analyzed, and the identified practices were presented in the second survey, which asked the experts to give their level of agreement with the stated reading practices. These statements were evaluated using closed questions with Likert scales; a comment box was included to gather additional insights from the experts. Data collected from the second survey were analyzed, and all of the identified reading practices achieved greater than 75% agreement among the expert panel. To further validate and confirm the identified reading practices, a separate survey was constructed, and other practicing laboratory professionals and educators (practitioners) were invited to indicate their level of agreement with the stated reading practices from the expert panel. All of the identified practices reached consensus at 90% agreement or higher among the laboratory practitioners. Identified practices demonstrated that reading practices in MLS relate to keeping informed, such as reading to stay educated about current trends in medicine or researching a new instrument or test method. Reading practices in MLS also concern evaluation and action, such as reading a standard operating procedure to run a test or interpreting a patient test result and performing additional testing. In addition, not all reading or interpreting in MLS is limited to words on a page, but it also includes numbers, color changes, agglutination reactions, bacterial-colony and cell morphology, and auditory and visual cues. For the 15 identified reading practices, absolute deviation scores among the expert panel and practitioners were consistently low, suggesting that both the expert panel and the laboratory practitioners agreed consistently at the same level for all identified reading practices, which enhanced the validity of the findings. Characterizing the reading practices of MLS provides educators and those who train new employees with a framework to offer explicit instruction of these practices. To equip preprofessional students and novice professionals with these skills during their education and training allows reading practices to be unambiguous rather than reliant on the students and novice professionals to learn them on their own.

ABBREVIATIONS: MLS - medical laboratory science.

Clin Lab Sci 2021;34(1):7

Christina G. Camillo, *Salisbury University, Salisbury, Maryland*

Address for Correspondence: Christina G. Camillo, *Salisbury University, Salisbury, Maryland, cgcamillo@salisbury.edu*

Downloaded from http://hwmaint.clsjournal.ascls.org/ on October 16 2026