LITERATURE REVIEW FOR THE FIVE HIGH-LEVERAGE INSTRUCTIONAL STANDARDS

PREPARED FOR THE NEVADA TEACHERS AND LEADERS COUNCIL JOINT TASK FORCE DECEMBER 2012

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INTRODUCTION

PURPOSE OF THE LITERATURE REVIEW

The purpose of this literature review on the Five High-Leverage Instructional Standards is to explicate the foundational theories and research from which the standards are abstracted. The literature that this review draws from encompasses the areas of education and psychology, cognition and development, learning theory, metacognition, motivation, and formative assessment.

The Five High-Leverage Instructional Standards are:

- 1. New Learning is Connected to Prior Learning and Experience
- 2. Learning Tasks have High Cognitive Demand for Diverse Learners
- 3. Students Engage in Meaning-Making through Discourse and Other Strategies
- 4. Students Engage in Metacognitive Activity to Increase Understanding of and Responsibility for Their Own Learning
- 5. Assessment is Integrated into Instruction

The Five High-Leverage Instructional Standards is an interwoven set of high-leverage principles of learning. While the standards are treated separately in this review, there is considerable overlap in the literature among the standards.

The five standards are intended to reflect the practice of effective teaching in the classroom. They are not intended to act as curriculum. However, the standards are not enacted in a vacuum, but rather, they are interwoven and interact with curriculum and student standards in teachers' classroom practice.

All cited literature in the document are included in the References, and the Appendix contains summaries of cited studies, research syntheses, and theoretical papers.

METHODS

The literature search for the *Five High-Leverage Instructional Standards* was conducted using an iterative and concurrent multi-step method. To inform what the critical research for each area was (e.g., learning theory, motivation, formative assessment), seminal studies, theories, and the work of experts in the field were consulted. Next, literature reviews (e.g., from peer-reviewed journals such as *Review of Educational Research*) and meta-analysis studies were selected for their extensive breadth and number of studies included in such articles. Also included in the literature review search were studies that referenced seminal studies. That is, a search of studies that referenced a particular article – for example, Ames' (1985) article on classroom goals and motivation – was performed. This was done in order to take into account more recent studies based on seminal works. In addition, a snowball method was employed in which references in previously collected articles were reviewed for additional works. Searches of empirical studies were conducted using computerized databases, mainly Educational Information Center (ERIC) and PsychINFO, using key terms such as metacognition, prior knowledge, cognitive demand, diverse learners, integrated and formative assessment, student engagement, motivation, and discourse. The articles and books that resulted from the literature review search provided the theoretical and practical bases for the *Five High-Leverage Instructional Standards*.