

Gamifying Motivation Theories: Developing a Crossword Puzzle for Management Education

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DOI: <https://dx.doi.org/10.47772/IJRISS.2025.924ILEIID0069>

Received: 23 September 2025; Accepted: 30 September 2025; Published: 31 October 2025

ABSTRACT

Motivation theories are an important part of management and human resource education, but many students find them difficult to understand and remember when taught through traditional methods. This concept paper introduces the *Motivation Theories Crossword Puzzle* as a creative gamified learning tool to make these abstract ideas more engaging and easier to learn. The crossword includes key concepts from Maslow's Hierarchy of Needs, Herzberg's Two-Factor Theory, McClelland's Theory of Needs, and Vroom's Expectancy Theory. Built on the principles of active learning and gamification, the puzzle encourages student participation, problem-solving, and teamwork. This paper explains the design, educational purpose, and possible classroom applications of the tool. It shows how gamified activities like crosswords can help connect theory with practice, while also improving comprehension and retention. The proposed approach offers educators a practical strategy to make learning motivation theories more interactive and effective.

Keywords: gamification, motivation theories, crossword puzzle, active learning, management education

INTRODUCTION

Motivation theories are foundational in management and human resource education. Key frameworks include Maslow's Hierarchy of Needs (Maslow, 1943), Herzberg's Two-Factor Theory (Herzberg, Mausner, & Snyderman, 1959), McClelland's Theory of Needs (McClelland, 1961), and Vroom's Expectancy Theory (Vroom, 1964). Students often struggle to grasp these theories through traditional lecture-based methods (Armstrong & Taylor, 2020).

Active learning strategies, particularly gamification, enhance engagement, retention, and practical application of abstract concepts (Bicen & Kocakoyun, 2018; Dichev & Dicheva, 2017). Gamification uses game elements in non-game contexts to create interactive and participatory learning experiences (Hamari, Koivisto, & Sarsa, 2014). This paper introduces the **Motivation Theories Crossword Puzzle**, a gamified tool to improve comprehension and application of motivation theories in management education.

LITERATURE REVIEW

Challenges in Teaching Motivation Theories

Traditional lecture-based approaches often fail to engage students or support deep understanding (Biggs & Tang, 2011). Learners benefit from active, collaborative strategies that make theoretical content relatable and memorable (Deterding, Dixon, Khaled, & Nacke, 2011; Gee, 2012). Abstract frameworks such as Maslow, Herzberg, McClelland, and Vroom remain difficult to recall without active reinforcement.

Gamification and Active Learning

Gamification introduces elements like challenges, points, rewards, and collaboration to promote motivation,

engagement, and retention (Hamari, Koivisto, & Sarsa, 2014; Subhash & Cudney, 2018). It encourages students to construct knowledge through problem-solving, discussion, and application.

Gamified Learning Tools: The Motivation Theories Crossword Puzzle

The Motivation Theories Crossword Puzzle converts abstract theories into an interactive activity. The core theories covered include Maslow, Herzberg, McClelland, and Vroom, which are central to understanding workplace motivation (Maslow, 1943; Herzberg et al., 1959; McClelland, 1961; Vroom, 1964). Key terminology is reinforced through clues that enhance recall and understanding, supporting students' active engagement with content (Biggs & Tang, 2011). Gamified elements such as points, timed challenges, and collaborative solving are integrated to make learning more engaging, consistent with findings that gamification improves learner motivation and participation (Bicen & Kocakoyun, 2018; Hamari et al., 2014). Active learning is further promoted as the activity can be solved individually or in teams, allowing learners to link theory to practical scenarios (Subhash & Cudney, 2018). The delivery is also flexible, as the tool can be provided in printable, digital, or interactive online formats, making it adaptable across different teaching and training environments (Dichev & Dicheva, 2017).

DISCUSSION

The crossword puzzle addresses teaching challenges by engaging students actively. Gamified problem-solving encourages intrinsic motivation, promotes collaborative learning, and reinforces long-term memory.

The potential applications of this tool are diverse. It can be used in courses such as organizational behavior, human resource management, and leadership. In corporate training, it serves as a practical approach to teaching employee motivation principles. Additionally, it is adaptable to remote platforms, making it suitable for online or blended learning environments.

Gamified tools like this puzzle demonstrate the feasibility of integrating low-cost, interactive methods into existing curricula, bridging the gap between theory and practice.

To reinforce understanding of key concepts, a crossword puzzle was designed based on four major motivation theories: Maslow's hierarchy of needs, Herzberg's two-factor theory, McClelland's acquired needs theory, and Vroom's expectancy theory. This activity encourages learners to recall important terminology and apply theoretical knowledge in an engaging way. By solving the puzzle individually or in groups, students actively connect abstract concepts with practical learning outcomes.

To guide learners in completing the crossword activity, the corresponding clues are presented in Table 1, while the puzzle layout is illustrated in Figure 1.

Table 1 Clues for Motivation Theories Crossword Puzzle

Direction	No.	Clue
Across	2	Herzberg factor preventing dissatisfaction
Across	4	Herzberg's theory distinguishes hygiene and _____ factors
Across	5	Vroom's theory is also called
Across	7	Lowest level in Maslow's hierarchy
Down	1	Victor Vroom developed this theory linking effort, performance, and reward

Direction	No.	Clue
Down	3	McClelland emphasizes Achievement, Affiliation, and _____
Down	6	McClelland need associated with relationships
Down	8	____ of Needs Abraham Maslow proposed this framework to explain human needs

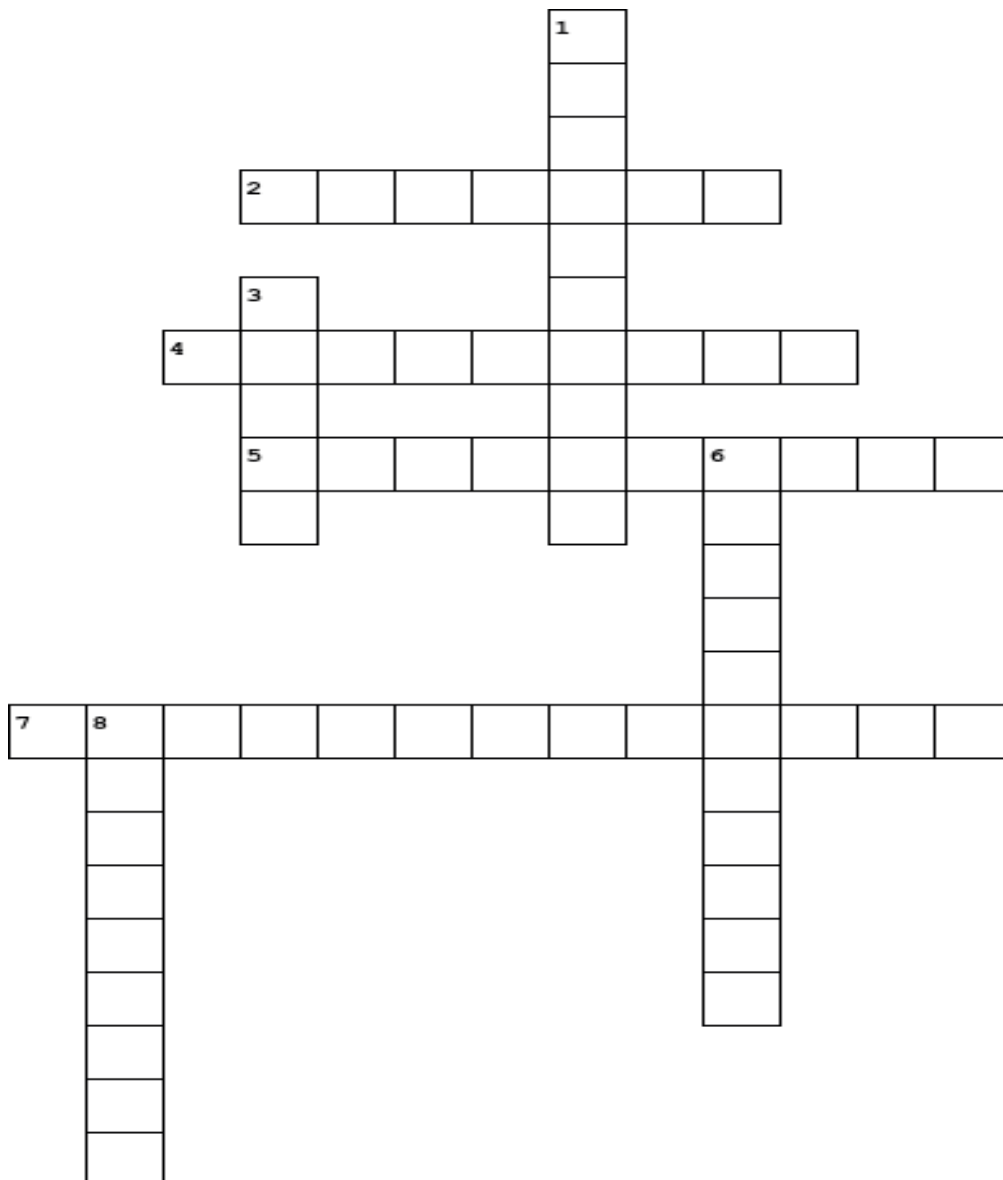


Figure 1: Motivation Theories Crossword Puzzle. This crossword puzzle is designed to reinforce key concepts from Maslow, Herzberg, McClelland, and Vroom's motivation theories.

(Note. The completed version of the crossword puzzle is available upon request for instructional use.)

Crossword puzzles offer an engaging way to reinforce theoretical concepts through active recall and problem-solving. By integrating gamification into learning, students are encouraged to interact with material in a more meaningful and memorable way (Dichev & Dicheva, 2017). Such activities not only enhance motivation but also support deeper understanding by linking abstract theories to practical application (Subhash & Cudney, 2018). In the context of motivation theories, the crossword puzzle promotes learner participation, collaboration, and critical thinking, making it an effective tool for both classroom and corporate training environments.

Future research can empirically assess the effectiveness of the puzzle through pre- and post-tests to measure comprehension, retention, and application of motivation theories. Student feedback surveys, focus groups, and observation during classroom implementation can provide qualitative insights on engagement, collaboration, and learning experience. Comparative studies between traditional teaching methods and gamified approaches may also highlight the added value of interactive learning tools in management education.

CONCLUSION

The **Motivation Theories Crossword Puzzle** is a gamified, active learning strategy that transforms abstract management concepts into a memorable and interactive experience. It improves engagement, comprehension, retention, and application of motivation theories while offering educators an innovative pedagogical tool. Future research can empirically test its effectiveness and explore expansion to other management topics or digital platforms.

ACKNOWLEDGEMENTS

The author gratefully acknowledges Universiti Teknologi MARA (UiTM) for its support, and extends heartfelt thanks to colleagues and family for their encouragement and inspiration.

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