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Multiple problem-solving strategies provide insight into students' understanding of open-ended linear programming problems.

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Summary: Open-ended questions that can be solved using different strategies help students learn and integrate content, and provide teachers with greater insights into students' unique capabilities and levels of understanding. This article provides a problem that was modified to allow for multiple approaches. Students tended to employ high-powered, complex, familiar solution strategies rather than simpler, more intuitive strategies, which suggests that students might need more experience working with informal solution methods. During the semester, by incorporating open-ended questions, I gained valuable feedback and was able to better model real-world problems, challenge students with different abilities, and strengthen students' problem-solving skills.

Classification: N65 D55

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