

# Students' Perceptions of Problem-Based Learning In Undergraduate Courses

Ashley D. Semler, David E. Lawver, & John Rayfield – Texas Tech University



## Introduction and Purpose

- Problem-based learning (PBL) is a teaching method becoming increasingly popular in multiple disciplines (Hawley et al., 2017; Savery, 2006).
- PBL is a pedagogy that allows students to guide their learning by solving real-life problems, engaging in critical thinking, applying course content, & working individually & collaboratively for the desired outcome of enhanced understanding (McMay et al., 2013).
- Self-management, communication, decision-making, teamwork, professionalism, experiences, & leadership are the repeatedly top-ranked skills employers are looking for when hiring (Rosenberg, Heimler, & Morote, 2012).
- The purpose of this study was to get insight into students' perception of problem-based learning, problem-based learning environment & employability skills in undergraduate courses at Western Texas College (WTC).

## Framework

- The PBL model (Hmelo-Silver, 2004), shows the steps students go through as they are engaged in PBL.
- Savery (2006) compiled a list from both the website for the PBL Initiative and the Southern Illinois University School of Medicine (2017) which includes the necessary steps to classify a lesson as PBL.
- Students must be responsible for their learning; it must be unstructured and allow free inquiry.

## Methods

- The target population included students enrolled in courses at Western Texas College in Snyder, Texas, during the spring semester of 2019.
- The Senocak (2009), Hawley et al. (2017), and Crawford et al. (2011) studies were used to create the complete questionnaire that was given to the students at the end of the spring 2019 semester.
- The instrument included four sections with 65 questions rated on a 5-point Likert type scale.
- Analysis of this research was quantitative in nature examining students' perspectives, demographics, and employability skills.



## Findings

- Majority of the students were female, with 66% ( $N = 57$ ), while the remaining 34% ( $N = 29$ ) were male.
- A mean of 3.94 was calculated for the PBL environment meaning that often the students are participating in the 23 items from the Senocak (2009) study.
- Communication skills had a mean of 4.26, students agreed they gained this skill by being in a PBL course.
- Students' agreed teamwork ( $M = 4.21$ ), decision-making skills ( $M = 4.17$ ), leadership ( $M = 4.17$ ), self-management ( $M = 4.13$ ), experiences ( $M = 4.11$ ), and professionalism ( $M = 4.07$ ), skills were gained.
- The overall grand mean for the students' perceptions of PBL was 4.13.
- Students agreed most when PBL was used in the course; it made the discussions and the subject matter more relevant and realistic ( $M = 4.21$ ).



## Conclusions

- Students preferred the PBL method.
- Respondents perceived they were able to gain employability skills such as communication, teamwork, and leadership.
- Professionalism, experience, and self-management skills need to be improved according to the respondents.

## Recommendations

- Instructors who are currently teaching using the PBL method need to improve the PBL environment.
- Allow respondents to share their results with group members and conduct evaluations of member's performances.
- Studies should be done to determine if students are retaining more knowledge when enrolled in a PBL course.
- Look at how to encourage and teach the instructors to use this method.

## References

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