

students in understanding concepts (Primandiri; 2017; Santoso, 2017; Mahanal, Zubaidah, Sumiati, Sari, & Ismirawati, 2019). In organizational learning variables, research results can be used as case studies, problem-solving, and representative examples of knowledge (in the form of facts) (Pratama, 2018). Contextual learning is also able to motivate students to learn because students have a description of the object being studied more clearly and real by everyday life (Pintrich et al., 1993; Wuryaningrum; Sartono, & Dewahrani, 2014; Bustami, Syafruddin, & Afriani, 2018). The other hand, this research has also shown that lecturer must be able to design their learning for teacher candidate (Ristanto, Zubaidah, Amin., & Rohman, 2018). Teachers can make meaningful learning by linking concepts that will be taught to aspects of human life (Emenike et al., 2011) - stated that teachers need to think about how students can maintain their learning motivation in class so they can achieve achievement (Ames, 1990; Fitriani et al., 2018; Ismirawati, Corebima, Zubaidah, & Syamsuri, 2018).

CONCLUSION

The mechanism of anticancer molecular action of *P. angulata* extracts can occur because *P. angulata* extract contains physain which can interact with GLI1. Interactions between physalin and GLI1 can be formed due to the existence of two types of chemical bonds, namely hydrogen bonds and hydrophobic interactions. Scientific information is very feasible to use as material for developing Chemistry teaching materials for Biology. The results of the trial revealed that visualization of chemical bond models based on research results could increase student learning motivation and can improve the student's concept understanding up to 0.48 (middle category).

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