This study examines how future mathematics teachers support English language learners (ELLs) when making sense of mathematical problems with complicated language use. In this study, three middle school mathematics prospective teachers, who enrolled in a university-based teacher preparation program, worked with ELLs in one-on-one settings while learning various ELL teaching strategies. The strategies they implemented when working with ELLs were analyzed through various sources such as written lesson plans, videotaped teaching practices, and written reflections. As time evolved, all of the teachers began to apply life-connection strategies and to integrate various visuals closely connected to mathematical situations into their lessons, which they learned during the interventions. They showed a positive influence from the interventions although their use of strategies were limited. This study suggest that mathematics teachers need to have significant preparation infused with practical experiences and examples in order to design a linguistically and conceptually rich lesson while making meaningful connections between mathematics and ELLs’ experiences.