The objective of this study was to investigate perspectives of interns in the licensing course in Physics of the Londrina State University – UEL about non formal education activities developed during the Methodology and Practice course, specifically, at the Londrina Museum of Science and Technology – MCTL. Information collection was accomplished by interviews with eight interns who had completed the internship and all its activities. In this way, we strove to identify their perspectives about the internship, namely, their difficulties, the facilities, the advantages or disadvantages, what they learned and the contribution of this experience to their professional development. The format of our study was a qualitative approach in that it considered the description, the significance, and the meaning attributed to the activities developed by the interns. The results demonstrated that the accomplishment of activities at the museum contributed positively to the interns’ experience, because they were made aware of the museum’s variety of objects, equipment and experiments, familiarized themselves with the routine of service, observed the interest and enchantment of visitors, and learned how to clearly provide explanations in a non formal environment of Physics education. Nevertheless, there were some deficiencies that stood out. We initially noticed a lack of awareness on the part of the interns about the objective of developing activities in a museum. For some of them, the conclusion at which we arrived was that their internship served as type of teacher training in which they could familiarize themselves with the museum and discover things that might later be of use in the classroom. This shows that they did not understand that the museum should serve as a complement to the school. We also noted the absence of a monitor training program (which could have helped the interns), as well as a lack of partnership between the museum and school (evidenced by the attitude of several teachers who visited the museum). We understood that the format of the internship (observation of classes, service at the museum and management) showed itself to be a viable alternative for the formation of the future Physics teacher.

**Key words:** supervised internship, museum of science and technology, professional development of Physics teachers, non formal education.