When should accessor methods be used?

**Returning an Object through an Interface**: Accessor methods that return an object via an interface are acceptable. This practice helps in isolating the code from potential changes to the implementing class. By utilizing an interface, any alterations to the internal implementation of the provider class can be accommodated simply by adjusting the definition of the returned object, thereby safeguarding the external code that utilizes the object through its interface.

**In the Procedural Boundary Layer**: Accessor methods become necessary in the procedural boundary layer, particularly when interacting with external procedural subsystems such as databases or operating systems. As these interfaces are generic by nature, offering a high degree of flexibility becomes imperative. For instance, in the case of Java Database Connectivity (JDBC), the class design must be flexible to accommodate diverse use cases, given the variability in how users might interact with the database. Therefore, in such boundary APIs, the presence of accessor methods is justified due to the unpredictable nature of their usage.