Principles of Workplace Design

Four principles govern the workplace design. They may seem like common sense but can be overlooked.

PRINCIPLE	DEFINITION
Importance	Locate components that are essential to a safe and efficient operation in the most accessible positions. 'Accessible' refers not just to ease of reach, but also to visibility and audibility.
Frequency of use	Make components that are used frequently the most accessible.
Function	Locate components with closely related functions close to each other.
Sequence of use	Locate components that are often used in sequence close to each other and in a layout consistent with the sequence of operation.

Characteristics of Design

Effective design of workplace and equipment always has certain characteristics.

ACCESS	
Access	When providing physical access, the design accommodates for neutral postures and provides space for the person to perform the work. The design also accounts for their clothing or any protective covering worn by the worker and any equipment carried by the employee.
Shortcuts	*If equipment is perceived by users to be too complex, or it requires more effort to operate or maintain than they believe is necessary, they may look for a 'shortcut', which could be perceived as being safe when it isn't.*

EXPECTATIONS	
Expectations	If the equipment is not designed to operate as per the users' cultural and stereotypical expectations, the chance for human error is significantly increased.
Simplicity	Reducing the amount of activities the operator has to complete to lower the complexity of the task can reduce the chance for human error.

CONSISTENCY	
Consistency	Humans expect consistency in the design and arrangement of their workplace. If a part of the workplace appears in more than one location in their work environment, operators will likely expect it to work the same way at every location. *For example, if buttons are laid out in a particular way on one area of a control desk, but the same buttons have a different layout in another area of the desk, there is a risk of errors occurring.*
Efficiency	*If the design is felt to be inefficient by the user they may modify it, which will often solve the initial problem but may introduce other problems that may be as bad, or worse.*

Source: iCAB CIEHF Free 'HP For All' Elearn