ILETC Spatial Transition Pathway



Indoor Enivronmental Quality (IEQ) Sensor

Phase	Туре		Themes
EarlyImplementationConsolidation	○ Strategy⊘ Tool	 Collaboration & teamwork Curriculum Design affordances Design & process Evaluation Leadership & change Pedagogy 	 ○ Professional development & support ○ School structures & organisation ○ Spatial competencies ○ Student experience ○ Teacher experience ○ Technology ○ Time

What does this do?

Indoor environment quality (IEQ) refers to the quality of the environment within a specific built structure that impacts its occupants' health and well-being. Factors that impact IEQ include temperature, lighting, air quality, acoustics (sound), and relative humidity (RH). There are commercially available portable and/or digital sensors that measure these factors. Some devices measure a combination of these factors. There are even free smartphone and tablet apps that are able to do this albeit on a less accurate scale compared to dedicated devices.

How can it help?

Studies have shown that poor IEQ levels negatively impact educator and student performance. Light, temperature, and noise levels can vary within a single learning space and throughout the day. Awareness of the IEQ levels in learning spaces can help educators plan appropriate activities, arrange physical elements, and to a certain degree, mitigate issues that impair effective teaching and learning.

An example in practice

An educator can arrange the learning space to accommodate different activities and learning groups based on indoor environmental conditions. In the afternoon when the sun directly shines brightly inside the learning space, the educator plan to schedule activities that require good lighting to be held in that specific area. Using the sensors, the educator can identify varying acoustic levels in different parts of the learning space. Areas with low noise levels may be set-up for quiet and individual student activities that require concentration and focus. Areas that are noisier can be designated for group activities and discussions.

Where can I find this?1

Google play or the App Store are a good place to find easily accessible apps that measure IEQ levels.

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MC350 by Ecophon Saint-Gobain Available on the App Store/Google Play



