



Qualification of vocational training specialists in energy-efficient building automation

Promising Practice

Implemented by:

Hessian Institute for Continuing Vocational Education and Training (HLfT) and
the German Federal Ministry of Economic Cooperation and Development (BMZ)

Where:

India

Status:

Launched in October 2021

Summary:

Indian vocational schoolteachers and trainers are obtaining qualifications in energy-efficient building automation through the 'Indo-German Programme for Vocational Education and Training II'.

Overview

The Hessian Institute for Continuing Vocational Education and Training (HLfT), funded by the state of Hesse, is a non-profit organization established in 1968 to provide technical, pedagogical and school management training for partner countries in the context of social and economic development. The organization works with various donors to offer capacity-building programmes on digitalization, greening TVET, German dual training system for TVET teachers and trainers, and gender mainstreaming. The institute trains small groups of multipliers in electrical engineering, IT, building system technology, automation, renewable energies and education management, using pedagogical methods and current learning and teaching standards.

Description

In-company vocational training

The 'Indo-German Programme for Vocational Education and Training II', implemented by the German Federal Ministry of Economic Cooperation and Development (BMZ), with the Hessian Institute for Continuing Vocational Education and Training (HLfT) as the technical partner, supports Indian partners in developing and improving cooperative in-company vocational training opportunities.

Skilled labour training in the vocational education sector

The Federal-States-Programme (BLP) project complements this by focusing on skilled labour training in the vocational education sector. HLfT decided to split the programme into several stages: the first phase took place in India using a blended learning format, and the second phase was a four-week course at the HLfT. The combination of practical teaching and appropriate didactic methods allows participants to acquire both technical and pedagogical skills. This was flanked by a school management training programme where administrative and decision-maker level participants for practice-orientated technical training learned about Germany's dual vocational training system in practice and the cooperation between vocational schools and companies.

Women in technical professions

In addition to technical content, the programme covered the topics of women in leadership and women in technical professions. The 'Indo-German Programme for Vocational Education and Training II' systematically involved female trainers and principals, women entrepreneurs and female employers in the design and implementation of cooperative VET models. Concrete recommendations for gender equality are also integrated into reform proposals.

Objectives

Indian vocational school teachers and trainers strengthened their competencies in energy-efficient building automation. In addition to strengthening theoretical competencies, the participants were given access to practical experience and insight into the dual vocational training system in Germany.

The programme taught technical and pedagogical skills through task-orientated teaching and corresponding subject didactics. This combination fosters the ability to adapt and transfer knowledge to any individual situation in the home country and upcoming changing technologies.

Outcomes and impact

The BLP project enhanced the trainers' experience with international best practices, strengthening the quality of training in their institutes. They integrated green aspects into automation solutions and enhanced their teaching focus with green solutions.

Green focus in training

The teachers who integrated a green focus in their training programme set an excellent example for others. By incorporating environmental awareness into their teaching, they are educating their students on sustainable practices and encouraging them to be responsible citizens of the planet. This approach is highly commendable, as it helps to create a more environmentally-conscious society.

Energy-efficient technologies are important parts of building automation training

As the world moves towards sustainable living, energy-efficient technologies have become integral to the building automation industry. Professionals in this field are now required to have comprehensive knowledge and training on these technologies to ensure that buildings are designed, constructed and operated in an environmentally-friendly and energy-efficient manner. Incorporating these technologies not only helps reduce energy consumption and carbon footprint but also leads to cost savings for building owners and occupants. Professionals in this field must stay up to date with the latest advancements and practices in energy-efficient technologies to provide the best possible solutions to their clients.

Institutional leaders support these approaches

Institutional leaders are highly supportive of these approaches. They believe these approaches are essential for success in various areas such as education, business and personal growth. They understand that these approaches help to maximize productivity or improve efficiency. Institutional leaders also recognize the importance of continuous learning and development to stay up to date with the latest trends and technologies. Therefore, they encourage others to adopt these approaches and lead by example.

Challenges

Limited resources did not allow for long face-to-face training sessions

To compensate for the limited resources, blended learning formats were designed and implemented, with remotely initiated and supervised practice self-learning programme components as preparation for the face-to-face programme.

Unstable internet in some Indian regions

To cope with the internet situation, there were asynchronous learning activities, which were reinforced by mutual support within the participants' group.

Action - oriented learning methods

Combining pedagogic techniques with technical content helped broaden minds and insights into competence-based learning and action-oriented methods.

Next steps

The programme continuously focuses on picking up new green technologies to keep training content up to date.

Learn more

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