



RESEARCH ARTICLE

ASSESSMENT OF TECHNICAL GROWTH IN REFRIGERATION AND AIR CONDITIONING TECHNOLOGY

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ABSTRACT

This study assessed practical discussion on helping the faculty's enhancement of various competencies. Further, the study conducted to examine the essential core competencies for training faculty in Competency Requirements under the Philippine Technical Vocational Education Training (TVET) in Trainers Qualification System (PTTQS) handling Refrigeration and Air-conditioning Technology at Cebu Technological University. The qualitative and quantitative data were collected through interviews and document analysis. Moreover, the importance of core competencies as rated by respondents and the mean rating were calculated for each competency. The quality of the results had to be applied for a systematic training enhancement for effective implementation and guidelines. Thus, enhance the competencies in Refrigeration and Air Conditioning Technology.

INTRODUCTION

The nature of work is changing rapidly due to new technology and work organisation innovations. This has a dual effect by tending to dramatically reduce the number of low or unskilled positions available globally and additionally putting emphasis on the need to extend worker's skills over a shorter and shorter time frame. It is no longer sufficient to only have initial skills in say, a recognised trade as the changing nature of work will require individuals to regularly upgrade their skills or add completely new ones in order to remain fully employable. Most of this upgrading or addition of skills can be gained in a training centre or within the workplace but irrespective of how competency has been achieved it should be formally recognised in the same way as the initial trade skills. Work or qualification levels across the region skill standards developed in different countries have levels or hierarchies used to group the skills defined. In the Asia Pacific region these are usually based upon occupational classification structures and the particular qualification framework for that country. However, both of these vary considerably across the Asia-Pacific region and worldwide in terms of the number of occupational definitions, levels of qualifications, and terminology used.

Technical Education and Skills Development Authority (TESDA) develops competency standards for middle-level skilled workers. These are in the form of units of competency containing descriptors for acceptable work performance. These are packaged into qualifications corresponding to critical jobs and occupations in the priority industry sectors. The qualifications correspond to specific levels in the Philippine TVET Qualifications Framework (PTQF). The competency standards and qualifications, together with training standards and assessment arrangements comprise the national training regulations (TR) promulgated by the TESDA Board. The TRs serve as basis for registration and delivery of TVET programs, competency assessment and certification and development of curricula for the specific qualification.

Objectives

The purpose of this study was to assess practical discussion on helping the faculty's enhancement of various competencies. Further, the study conducted in order to examine the essential core competencies for training faculty in Competency Requirements under the Philippine Technical Vocational Education Training (TVET) in Trainers Qualification System (PTTQS) handling Refrigeration and Air Conditioning Technology at Cebu Technological University.

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MATERIALS AND METHODS

The qualitative and quantitative data were collected through interviews and document analysis. Moreover, the importance of core competencies as rated by respondents and the mean rating were calculated for each competency. The quality of the results had to be applied for a systematic training enhancement for effective implementation and guidelines. Thus, enhance the competencies in Refrigeration and Air Conditioning Technology.

DISCUSSION OF FINDINGS

Pursuant to Section 5 (2), Article XIV of the Constitution of the Philippines, Cebu Technological University shall enjoy academic freedom wherein the teacher has the right to teach the subject of his specialization according to his best lights; to hold, in other subjects, such as ideas as he sincerely believes to be right; and to express his opinions on public questions in a manner that neither interfere with his duties as a faculty member, nor negate his loyalty to the University that employs him.

Under Title I (Declaration of Policies), Article 7 of University Code, the University envisions to be the center of excellence and development of research, instruction, production, and extension services for progressive leadership transcending global technological, business and industry-driven education. In Article 8, the mission of the University aims to provide advanced professional and technical instruction for special programs across the areas of specialization for global empowerment and the goals of the University is to produce knowledge-based and globally competent human resources who are reasonably flexible and attuned to the latest technology needs.

Fig. 1 presents the core competencies and all were validated by the respondents. The data inferred that the respondents need technical qualifications. The technical qualification refers to the National Competency Licensure conducted by the Technical Education and Skills Development Authority. Evidently, the administration as required by TESDA sees to it that the faculty must acquire the said license for the continuance of its operation of the technology as stipulated in the TESDA training for Assessor's and Trainor's Methodology Course in

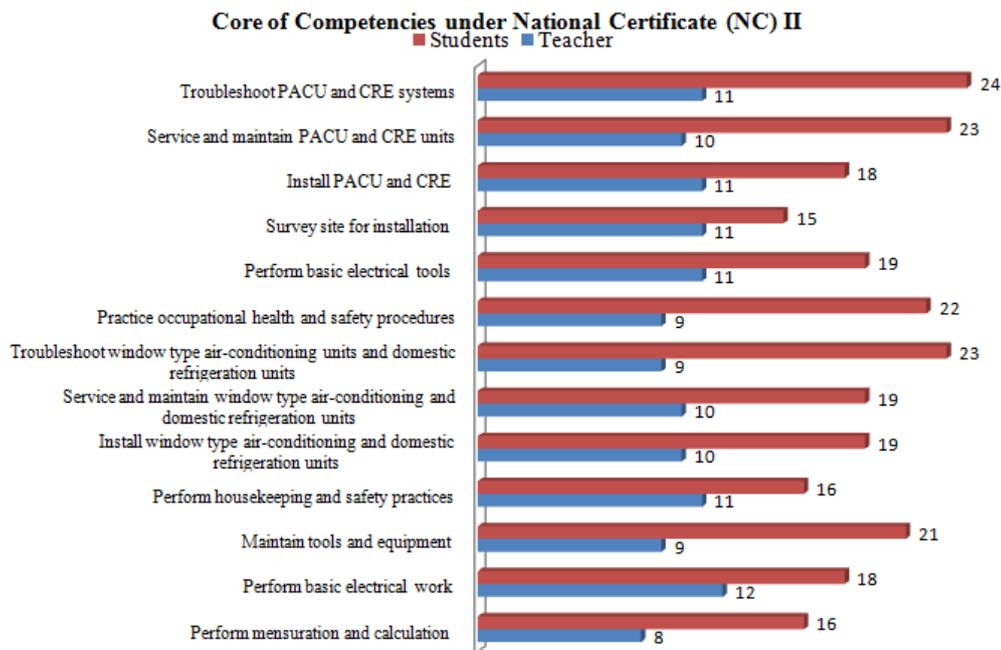


Figure 1.

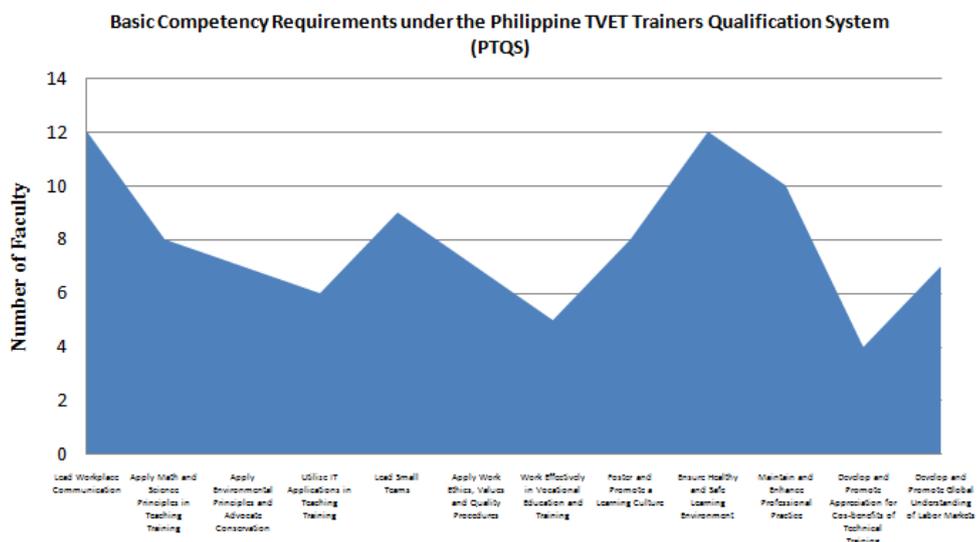


Figure 2.

Competency Requirements under the Philippine TVET Trainers Qualification System

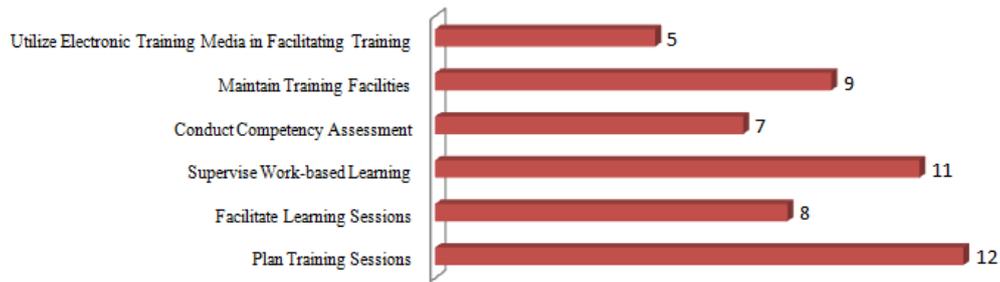


Figure 3.

the Philippine TVET Qualification Framework at least an instructor of the technology must have the NCII license. Further, it implies that the students must have to pass the NC II license for technical skills quality and can meet the global standard of competitiveness. In the analysis, the national competency standards were treated as a technology and the number of connections that it commanded was mapped on how the technology became strategic. Situational analysis (Clarke 2005) was used to make the connections between the national competency standards, and the elements that created it, visible. Bowker and Star (2000) claim that classifying work is essentially human work; it is undertaken in tacit as well as formal ways. We use categories to group materials on our desks and separate our undertakings. Fig. 2 shows the basic requirements under the Philippine TVET Trainers Qualification System.

Evidently, not all faculty gained the basic core of competencies required in Technical Education and Skills Development Authority as standard requirement for acquiring Trainers Methodology Certificate. Hence, there is a felt need to enhance the faculty through technical trainings set forth by TESDA. The decision to adopt competence as an organising framework was controversial and hotly debated in the 1990s (Chapman 1999; Chambers 1998; McAllister 1998; Milligan 1998; Cheek et al 1995; Alspach 1991; Ashworth and Morrison 1991). Its ubiquity as a working concept today belies this contentious introduction. The mainstream usefulness of the competency standards is observed in the recent development of a national toolkit for determining competence (Crookes and Brown 2010). Fig. 3 shows the number of faculty who had met the standard of core competencies. Perceptibly, the faculty must perform various core competencies in order to meet the standard of technical qualification. The skilled rhetoric of technology leaders and their ability to move across different social worlds to make the interests of the various social worlds align through the 'solution' of competence and competency standards was critical to this becoming the preferred method of classifying technology performance. They were active in professional and industrial organisations, and crossed over into regulation through participation on state regulatory boards. Their collective voices were effectively crafted into arguments to professionalise technocrats and published in the seminal text, *Issues in Australian Technology*, edited by Jenkins, King and Gray (1982).

Conclusion

The University's vision as a university of tomorrow wants to train highly competent faculty in preparation for center of development and excellence for global integration. However, the various core of competencies need to enhance for better theoretical development and more manipulative skills enhancement.

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