

Educating Industry Ready Professionals for Careers in the Construction Sector

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Introduction

This study has a focus on education for the construction sector.

The study is

- ❖ In collaboration with Dr Randy Rapp (Purdue University - retired)
- ❖ Has both higher education and construction industry perspectives
- ❖ It may develop as part of a larger research project

Research Objectives

The aim of this study is to

- ❖ Provide some background on construction education and industry
- ❖ Review the current state of construction education programs
- ❖ Offer construction employer viewpoints on what they are seeking
- ❖ Provide discussion on what appears to be of importance
- ❖ Contribute knowledge on the construction education topic

Literature Review

A literature review was conducted to provide some background on the topic with the following of note.

Construction Management Education

- ❖ Curriculum development
- ❖ Teaching approaches
- ❖ Impact of technology

Construction Industry Preparedness

- ❖ Relevant stakeholders
- ❖ Job ready graduates
- ❖ Industry competencies

Methodology

The research method used a combination of activities to provide some insights into this area.

- ❖ A concise well directed literature review
- ❖ Collection of secondary data from credible sources
- ❖ Evaluating any trends from the gathered information
- ❖ Providing an experienced commentary on the topic

Analysis and Results

The study collected secondary data to discover relevant views of education and industry stakeholders with some of the major points below.

Construction Programs

- ❖ University vs Vocational
- ❖ Program courses/topics
- ❖ Online options

Industry Requirements

- ❖ Industry knowledge/skills
- ❖ Digital capabilities
- ❖ Real world experience

Key Findings

The results provided some key findings that are important to observe.

- ❖ Programs/courses are many and varied
- ❖ Study is increasingly becoming more flexible
- ❖ Contractors are seeking certain knowledge/skills
- ❖ Industry experience is sought after

Topic Commentary

The following considerations are offered in respect to educating for construction industry readiness.

- ❖ Educators need to heed what industry requires and incorporate within program curriculums.
- ❖ Vocational programs should not be undervalued as employers see these as providing industry experience.
- ❖ Construction program flexibility can be good but care is needed in offerings.
- ❖ Bringing industry experience into the classroom can assist in providing some real world practicality for students.
- ❖ Broader graduate knowledge perhaps more than ever before is needed.

Conclusion

In conclusion we would like to offer the following thoughts...

- ❖ Education and development of future construction industry professionals is at the heart of this study.
- ❖ Many aspects including required knowledge and skills, technology and real world experience presented themselves.
- ❖ The findings will hopefully assist academics, curriculum designers, industry leaders and others.
- ❖ Future research is recommended in respect to curriculum design, industry experience and the impact of artificial intelligence in the construction education domain.

Thank you

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