

Basic Work Analysis Of Mechanical And Electrical Manufacturing, Installation And Construction Technology

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Abstract: *The reasonable implementation of mechanical and electrical manufacturing, installation and construction technology has an important impact on the orderliness and rationality of construction engineering construction. Due to the great complexity of mechanical and electrical manufacturing and installation, the installation and construction technology should be rationally selected in order to ensure the installation quality. In addition, construction cost, construction schedule, construction safety and construction quality should also be considered in the mechanical and electrical manufacturing and installation construction tasks, so as to improve the quality level of installation engineering. This article is mainly to analyze and study the basic work of mechanical and electrical manufacturing and installation construction technology.*

Keywords: Mechanical And Electrical Manufacturing Installation; Construction Technology; Basic Work; Analysis And Research.

1. INTRODUCTION

Key points of basic work of mechanical and electrical manufacturing, installation and construction technology. The basic work of simple mechanical and electrical manufacturing installation construction technology for the construction organization design and use of basic work of technology management, according to the mechanical and electrical current to our country manufacturing installation work, the study found because of the complexity of the mechanical and electrical manufacturing installation has larger, so in the process of installation construction faced difficulty is bigger also, And a variety of factors in mechanical and electrical manufacturing and installation construction will also affect the installation quality, so in order to ensure that mechanical and electrical manufacturing and installation work can be effectively carried out, the quality of mechanical and electrical manufacturing and installation should be guaranteed from the technical level. When the construction technology used in the installation and construction is reasonable, it can not only guarantee the quality of the installation and construction but also improve the economic benefit of the installation and construction project. In order to ensure the rationality of the application of the construction technology, we should pay attention to the following works: First, it is necessary to formulate the technical management system of mechanical and electrical manufacturing, installation and construction. Languages can be learned not only in language classrooms but in any place and at any time (Hyland, 2004). Out-of-class learning refers to “any form of learning that takes place outside the classroom and involves self-directed naturalistic learning or self-instruction naturalistic learning.” (Benson, 2013, p.64). This learning context has been proven to be a contributing factor in language gains. Black (2006), for example, conducted a case study in which informal Japanese English learners, despite their lack of interest in English as a school subject, experienced an enormous improvement in their target language due to their passion for American pop-culture. Similarly, Benson and Chik (2010) reported on several successful L2 learners in Hong Kong who ascribed their high-level English proficiency to their frequent interaction with native speakers in the online virtual community. It is true that out-of-class learning activities may help learners yield positive learning outcomes to some extent. According to Lighbown and Spada(2013), most people are convinced informal out-of-class learning is more effective than formal classroom- based instruction. From my point of view, this belief can hardly be held true. Although out-of- class learning has its unique advantages, there are some essential contributions that only instructional settings can provide. Successful language learners are supposed to capitalize on the learning experience both inside and outside language classrooms. The purpose of this study is to clarify the common misconception mentioned above by examining both strengths and limitations of out-of-class learning, in an effort to present a deeper insight into both settings for learning.

Only by formulating the management system can we reasonably carry out the work of joint examination of drawings and construction organization design. Second, due to the mechanical and electrical installation

construction throughout the project construction, electrical construction in construction engineering, water supply and drainage construction, and other links in construction are to use of mechanical and electrical equipment, mechanical equipment installation quality will influence on the architectural engineering construction quality, so in the mechanical and electrical manufacturing installation will be according to the requirements of the standard installation for construction. Third, the installation and construction of mechanical and electrical manufacturing is more complex, and the management mechanism should be improved in the technical management work, so as to effectively solve the problem when an accident occurs.

2. CONSTRUCTION CONTENTS OF TECHNICAL FOUNDATION WORK FOR MECHANICAL AND ELECTRICAL MANUFACTURING, INSTALLATION AND CONSTRUCTION

There are many influencing factors in the mechanical and electrical manufacturing and installation, so the mechanical and electrical manufacturing, installation and construction technology foundation work should be reasonable treatment of these influencing factors, and in the installation work in strict accordance with the standard process of installation, so as to ensure the installation efficiency and quality. According to the research on the basic work of mechanical and electrical manufacturing and installation construction technology in our country's current engineering projects, the main construction contents of the work are as follows. This essay examines the effectiveness of out-of-class learning in language learning, exploring the benefits and limitations of learning beyond the classroom and its impact on learners' language proficiency and motivation. Out-of-class settings offer personalized learning experiences and access to resources, motivating learners and fostering connections with the target language and culture. However, it lacks systematic study and immediate corrective feedback. The research concludes that a healthy learning ecology requires a balance between formal classroom-based instruction and out-of-class learning, with both complementing and reinforcing each other to maximize language learning outcomes. As such, to enhance efficiency and create a sustainable learning environment, teachers and learners should play a role in bridging the two learning contexts.

Without the restriction of brick-and-mortar classrooms, learners are able to take full advantage of an extensive variety of resources and venues to improve their language proficiency. Primary resources presumably deployed in the virtual arena contain movies, songs, and TV shows. Blogs, Facebook, mobile device apps, and online chatting are other resources that may be used in the virtual arena. The resources which tend to be used in the physical arena include studying abroad, traveling experiences, and language-related events on campus(Lai, 2014). Kuppens (2010) reported on Flemish sixth-grade learners. The participants who spent a large amount of time watching movies with subtitles showed a higher level of bilingual translation skills. Additionally, playing digital games could be positively correlated with L2 proficiency, particularly in terms of vocabulary knowledge as well as listening and reading comprehension skills(Sundqvist, 2009). Personally, classroom-based instruction used to be the only approach for me to learn English in middle school. After going to college, classroom based instruction cannot meet my demand anymore, and then I began to learn English beyond the classroom. It turns out to be a spontaneous and fun method to acquire up-to-date learning resources which makes abundant authentic input available for me. For example, I have mastered a vast majority of colloquial vocabulary and the latest buzzwords through watching the recent American dramas. For me, learning English outside a classroom is a convenient and interesting way of learning practical knowledge, while formal instruction in textbooks seems less attractive.

3. MECHANICAL AND ELECTRICAL EQUIPMENT INSTALLATION.

The installation of mechanical and electrical equipment is the installation of mechanical equipment used in the construction of engineering projects. Only reasonable installation can ensure the performance of equipment, so as to avoid the emergence of quality problems in the construction process. our country's current mechanical and electrical manufacturing installation work is divided into two kinds, respectively for the overall installation and disassembly, installation and the collapse of the whole installation work in the same process, is the model of the equipment before the installation work, and the elements of quality inspection, after the completion of a check to ensure that after mechanical equipment type and quality of qualified for the installation work, In the process of installation, the installation position should be determined first, and then the defensive line test should be carried out. After the completion of installation work, the accuracy of the equipment should be adjusted according to the standard requirements when using the mechanical equipment [1].

Second, bus installation. An important link of busbar for the installation of mechanical and electrical manufacturing installation, in the bus bar installation quality of installation for guarantee to choose reasonable of busbar material, choose bus after completing material transport to the construction site should be stored in a dry ventilated place, and in the insulation of the bus to the bus before using, check Only after the inspection is qualified can the installation work be carried out. During the installation, the bus should be moisture-proof first, and the extra stress should be controlled reasonably when the bus is connected. After the installation, the bus should be sealed in order to avoid the occurrence of leakage accidents.

Third, weak current system installation. Elv systems installed in the link more, want to undertake the installation of a multiple system work, so before the weak current installation should be to conduct a comprehensive inspection, the function of the weak current in the protection of weak current circuit is unobstructed to the follow-up work, in order to guarantee the quality of installation, in the process of installation work should pay attention to the input software debugging. Technical management methods for mechanical and electrical manufacturing, installation and.

The suggestion seems to make sense when considering the complex interaction between individual differences and learning environments. Learning (and relative success) is an outcome of the complex interaction between learning context and learner characteristics (Robinson, 2002). As such, it is advisable for teachers to find the optimal fit between person(L2 learner) and situation(learner condition) in L2 classroom (Robinson, 2002). In reality, however, it is impractical, or even impossible for teachers to customize instruction to suit the abilities or preferences of each one (Lightbown & Spada, 2013). From this way of thinking, out-of-class settings, which provide learners with more freedom to learn according to their personal preferences and characteristics, are likely to fill this gap.

Nevertheless, not all out-of-class experiences contribute equally to language gains (Lai & Zhu & Gong, 2015). In his study, Sundqvist(2011) discovered that, among the informal learning activities that Swedish English language learners participate in, activities that demanded the learners “to depend heavily on their language skills,” including reading newspapers/magazines, reading books, surfing the Internet are stronger indicators of learners’ vocabulary size and oral proficiency level than activities such as watching films, listening to music, etc. This is to say that the effectiveness of out-of-class learning depends largely on different categories of activities learners engage in.

On top of that, out-of-class learning is susceptible to the influence of internal and external factors. Without adequate guidance and supervision, it is less likely for learners to learn autonomously and effectively. For instance, in Chusanachoti’s(2009) study, the participant Benya reported her tendency to engage in receptive English activities instead of productive ones, due to her lack of confidence. She was shy and could not articulate well so most of the time she refrains from speaking with others in English. In addition to that participants in Hyland’s(2004) research showed a tendency to focus on private instead of face-to-face “public” activities, including chatting with people in shops, talking over the phone, speaking English with friends. The reasons for their avoidance involved the negative social connotations of using English in their community. My personal experience is mostly in line with that of Benya. Although I am aware that practicing English with native speakers could make a profound difference in English communication skills, I am too shy to speak with others in English. To some degree, my introverted personality limits my learning opportunities out of class, to the disadvantage of the development of my oral English. As what has been ascertained, It is unjustifiable to jump to the conclusion that informal out- of-class learning is more efficient than in-class learning, given that “learning on the streets” might be subject to a number of uncertain factors, which includes the types of activities learners participate in, and other internal and external factors, etc. To further understand out-of-class learning settings, the paper is designed to bring to light its benefits and limitations.

4. CONSTRUCTION

Pursuing this further, intensive research has demonstrated that out-of-class learning helps learners maintain motivation in learning. Compared with the monotonous and tedious in-class experience, learning a language beyond classroom allows learners to choose their favorite ways of learning. For example, in Lai’s (2014)study, his participant who is into Spanish songs suggested her strong desire to comprehend the lyrics of Spanish songs encourages herself to learn further about this language. For instance, I am a big fan of Tom Hiddleston. So most of the out-of-class learning resources I choose are from his movies or speeches. As I am particularly into his accent, I start to practice British pronunciation and imitate his speech. Learning process seems not that painstaking for me when I am watching my idol.

Last but not least, out-of-class learning enhances learners' connection with their target language as well as the target culture. In conventional classrooms, learners tend to feel separated from the real and natural language environment, while out-of-class learning tends to integrate learners into the authentic language context. Lai's(2014) study could be a good case in point. The participant in his study indicates that their experiences of communicating with foreign friends familiarize themselves with how the language is actually used. As an English learner, my trip to America gives me more access to practice English with native speakers in daily life, which is something in-class settings fail to offer. It gives me a strong sense of accomplishment because I feel that I am able to put what I've learned into practice by using English in an authentic language environment.

4.1 Examination of drawings

Drawing review has an important impact on the effective management of mechanical and electrical manufacturing and installation technology, the main purpose of which is to ensure the rationality of drawing design to ensure the reasonable construction of mechanical and electrical manufacturing and installation. Drawing review includes self-review and joint review. the self-review refers to the review of data and content of electromechanical manufacturing and installation drawings by the corresponding installation technicians after they are sent to the general project. Joint audit is the review of the drawings designed by the design unit according to the requirements of construction. Whether it is self-audit or joint audit, it is an important work to ensure that the construction drawings meet the requirements of the project.

4.2 Preparation of construction designs

Construction drawings is the important reference basis for the installation work, so the rationality of the design of mechanical and electrical manufacturing installation technology have great effect on the effective management, in the drawing design work according to the requirements of the engineering and construction technology used in the terms of the contract to install the rationality and scientific nature, and assess the applicability After that, the construction plan is prepared in a reasonable way, so that the construction task can be carried out smoothly from the reasonable allocation of resources.

4.3 Technical disclosure and technical change

The work of technical disclosure is to make technical personnel familiar with the task requirements of mechanical and electrical installation engineering before the formal construction of mechanical and electrical manufacturing. When technical personnel understand the difficulties and key points in the installation work, they can avoid the emergence of a variety of quality problems. Therefore, in order to ensure that the technical management of mechanical and electrical manufacturing, installation and construction can be reasonably carried out, it is necessary to understand the requirements of using technology and process and matters needing attention before the formal construction [2].

Mechanical and electrical manufacturing and installation process will be affected by a variety of factors, so when some problems occur, in order to ensure the rationality of the project, it is necessary to carry out technical change, technical change work requires special technical personnel to strictly review the change documents, in order to determine whether the change requirements are reasonable. When the alteration document is reasonable, it can be sent to the design unit and the construction unit for visa approval. Second, due to the mechanical and electrical manufacturing installation shall be carried out in different environments, so in order to guarantee work for installation of the reasonable construction of also want to do a good job in engineering case records of these data for mechanical and electrical manufacturing installation to provide the reference for the rules and regulations for the management of the construction technology, can also serve as late into the reference content of engineering plan.

5. CONCLUSION

To sum up, mechanical and electrical manufacturing and installation construction runs through the whole engineering project, so the quality of installation work has a direct impact on the quality of the engineering project. Therefore, in order to ensure that the engineering project can be reasonably carried out, in addition to the installation and construction work, Also from the drawing review, construction design preparation and technical disclosure and changes in a variety of work on the installation and construction of reasonable management.

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