

# [Examining the importance of effective communication in construction construction ...](https://assignbuster.com/examining-the-importance-of-effective-communication-in-construction-construction-essay/)

Civil engineering works are not just the building of structures, but they provide a livable and safe environment for society. To make it all work, the disciplines involved must be in constant communication. They cannot work in isolation and must communicate with other civil engineers and professions and also be able to communicate with society. When communication fails it will have a negative effect on the works.

In order for communication to be effective a common language must be used which is understood well by the various disciplines. In the Oxford Dictionary the word ‘ communication’ is defined as “ to share or exchange information”, and the word ‘ effective’ is defined as “ producing an intended result”. So, effective communication in civil works can be defined as ‘ communication which produces a project on budget, time and to customer’s satisfaction’. In communication between two parties, there are four key components involved1:

Compared with products manufactured in factories, where most if not all the design and production stages are carried out by a single company and the end products are the same, civil engineering works are manufactured on site with a number of different disciplines involved in the process at different stages of design and construction. These works are always made to the customer’s specifications, making them unique for each project.

With so many different disciplines3 involved, there is an important need for effective communication between them for any project to be successful. For example, the customer must communicate their needs to the consultant engineers. The consultant engineers must understand the customer’s needs and interpret them into a design. Then, once the plans have been developed and a bid has been taken, the contractor must understand the plans and communicate the plans to the sub-contractors.

It can be seen from their recommendations that a crucial element for any of them to be successful is the ability to communicate and listen effectively and although the Task Force looked specifically at housebuilding, their findings can be applied to civil works as well.

It has been over ten years (currently 2009) since the Construction Task Force’s recommendations. Looking at the performance of the construction industry in last 5 years, it can be seen that there has been improvement but a lot is still needed. A summary of the performance of the construction industry from 2004 to 2008 is shown in Table 1. 1.

Client product satisfaction has been at 80% or above for the last five years, but this also means that 1 in 5 clients have not been mostly satisfied with the final outcome of their project. Also the figures for defects last year show that approximately one third of defects had a negative impact on the client.

There were also other problems. Multiplex complained that the client had made 600 design changes to the contract and there were disputes such as the definition of practical completion. There were delays with the raising into position of the arch. Multiplex said that the delays and other troubles were the result of the subcontractor Cleveland Bridge’s late and defective design or fabrication work. Cleveland Bridge said that the delays and other troubles were because of too many variations or the late supply of information by Multiplex or by the structural engineer, Mott MacDonald Limited.

As the old saying goes ‘ A picture is worth a thousand words’, in the same way computer programmes such as CAD can be used to produce 2D and 3D drawings, which can then be communicated to other project members. There is industry standards in terms of symbols and legends used on drawings so that everyone is able to understand what is being communicated. CAD drawings can also be sent electronically to the other team members so that they are able to view the same information and develop their information onto the design. They are also able to analyse the structure and its connection with other structural elements and make any adjustments if necessary.

MidCity Place, an office development in London took 57 weeks to construct, which according to the developers Stanhope Plc is half the industry average build time and at a cost 20% lower than the market average for a building of its quality15. The project was completed in December 2001, eleven weeks ahead of schedule and within budget.

The contractors Bovis Lend Lease and Stanhope developed a logistics process based on experience in the car industry. The logistics programmes scheduled all the components in their sequence in the construction and put this information into 3D modelling software. The programme modelled the building and its assembly and also allowed them to find glitches in the delivery and construction sequence.