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Abstract

The report is based on the transferable skills which are taught at a higher level of education and used within the respective employment industries. The report looks closely at one particular area of transferable skills which is problem solving.

Problem solving is broken down into a number of sections, detailing each and concluding on why problem solving is an important skill to have and use within an employed environment.

Introduction

The following report is based on the transferable skills taught in higher education. The objective was to give clear, descriptive advice and guidance on a chosen skillset which can be used within education and transferred to the working environment. There are many variations of transferable skills such as, time keeping, report writing, team working and problem solving. This report covers problem solving and the techniques used in order to overcome and accomplish a given task or problem.

Background

"In the 1980's, a number of surveys were conducted which suggested that graduates in the UK were under equipped for employment. surveys of employer satisfaction with the abilities of their graduate employers indicated skills shortages in the following areas; Giving oral presentation, written communications, numeracy and it abilities" (Assiter, 1995, p. 11)

Problem Solving

Problem solving can be broken down into a number of aspects, of which, each are a skill in their own right. To solve any problem is it essential it is broken down into smaller segments.

Evaluating the Problem

"Analysts must be comfortable with a number of tools and should not be afraid of trying out several on any given problem. They are all methods that help us to think our way through the issue".

Problem solving is a key transferable skill that is utilised in life and in work. Identifying the problem is most importantly the first step to solving any problem, when you have identified you can then continue on to the next steps to diagnose. (CReeducation.org, n.d.)

Gathering as much information as possible is crucial to help understand what it is you have actually identified and then allow you to take the step by step analysis of fully identifying the surrounding problem. Once all following information is gathered you are then able to come up with strategic planning and problem solving techniques. You may discover at times that it is not a single problem you have uncovered but a number of minor problems. (Skills You Need, 2015)

Identifying a problem is to ask:

Why the problem started in the first place, this will give you the knowledge to if it is likely to happen again in the near or distant future, It will also give you some information as to what went wrong in the very first instance.

How did the problem start is what you must workout with step by step questions and careful analysis to find out exactly how the problem occurred and can you use this knowledge to help diagnose.

What exactly was the root of the problem? There are usually three different factors that could be the cause when looking at what caused the root of the problem which are physical, human and organisational causes. Knowing what

fused the problem will hopefully help you to create a solution to avoid that starting trigger in future reference.

.When exactly the problem started? Has it been there for a while or has it just started? (MindTools, 215)

As a student in university being able to identify a problem will help you in so many ways including self-reviewing your own work. You will be able identify any problems in your own projects and come up with a solution to correct the issue. Being able to analytically think will help you to understand a problem and apply best practise. (University of Leeds, 2015)

Managing the Problem

In order to manage a problem you must first setup a research plan, your research plan will help you understand the issue in more depth before searching everywhere for a possible answer. This applies to problems you will come across in university and later on in your career.

Research

Research is the investigation into a particular subject or topic in order to discover information that can aid you in your work (Pearsall & Trumble, 2002). One element of research integral to problem solving relates to defining the initial problem.

By defining the problem, you will find the root cause of the issue and by observing your findings you may uncover information that may aid you in research (Carterette & Friedman, 1998). This can be done by creating a visual representation of how the problem works, for example, a flow chart or a mind map.

Reviewing your chosen diagram will show where exactly in the process the problem arises and once this has been discovered you can take the next step in your research (Anon., 2009). Studying research papers of similar problems and analysing how those obstacles were overcome, can thoroughly determine how the solutions were achieved and then you can try to use similar methodology in your problem. The University of Bolton, and others like it, have tools that students can utilise in order to conduct a literature review of research papers and journals for materials that relate to any particular area. Outside of university life there are websites such as Google Scholar that allows you to search a databases of;

- Peer-reviewed articles
- Theses
- Books
- Technical reports
- Abstracts
- Reprints

(Anon., n.d.);

Collecting this information and using it effectively will help you understand methods that you can use to construct your solution to the problem.

Decision Making

"Decision making is the process of making important decisions" (Oxford Dictionaries, 2015).

In life we are faced with a number of decisions, these can vary in importance from simple questions like "Tea or Coffee?" to more complex situations which need a greater understanding before a decision can be made.

Decisions can be made instantaneously by our subconscious while others need to be speculated using our intuitive motions, a reasoned process or a combination of both. Decision making is an extremely important skill to develop which is used throughout a person's daily life and working career.

Intuitive decision makings involves using your own personal experience, values and ethics. A reasoned approach needs a formal structure with the use of facts and figures in order to deliberate a decision on two or more choices.

Effective decision making includes a number of other factors which all work together. Giving an effective and accurate decision an individual must first ascertain if they have the correct amount of information. Having too much information can often overwhelm the decision making technique however, having too little can often lead to misinterpretation and a poor decision being made. Personal emotions can also play a big part in the decision making process. Emotional attachment or detachment can also play a vital part in the decision making process.

Within the work place environment decision making can be done individually or as a collective to reach a specified goal or achievement. A strong ability to imagine the implementation of changes goes hand in hand with good decision making skills. Strong leadership skills can also develop from this skill, this is often shown by an individual's confidence and ability to control an issue or situation and decide on a successful resolution to the problem.

Implementation, Resolution & Review

An important first step to resolving the problem at hand is planning for implementation. A step-by-step action plan should be produced on the process or actions that are necessary for solving the problem. There is likely to be more than one viable solution to the problem at hand, and so, it is crucial to identify which solutions are to be kept, and which are to be disregarded. Dependent on the solution, it can merely be facts and figures which dictate whether a solution is worthy. However, in other scenarios it can purely be down to feelings and intuition.

Now that potential solutions have been selected, consider how they affect others and inform them about the decision if necessary. Then, identify any resources and allocate them accordingly, while considering the time available and deadlines that must be met. Identify which resources are useful, the implications of using them and how they are going to contribute to solving the problem. It is important that along each step of the way, team members report back, confirming that each step has been carried out as planned. This will ensure implementation flows successfully, and ultimately, becomes reality. There are however, a variety of general concerns that can prevent implementation, see appendix 1. (Study Guides and Strategies, 2011)

After carefully considering the possible concerns, and successfully completing implementation. It is important to carefully review the outcome and, at a minimum, produce a post-implementation evaluation of whether or not the problem was solved. The solution can only be effective if it is kept in place and is updated in order to respond to future changes. (ASQ, n.d.)

Therefore, an effective team will ensure that maintenance procedures are prolonged after the decision has been implemented, and reflect on their findings in order to identify the next step. For example, a business could implement a solution to a problem and fail to follow it up afterwards. If changes are made to the business as a whole (i.e. financial, human resources, staff) it could affect the implemented solution, causing it to be either less effective, or stop working all together. It is therefore necessary to regularly review and monitor the solution, in order to amend and update it as future changes are made to the business. (Restructuring Associates Inc, 2008)

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Appendix

Appendix 1:

1. Are resources (time, personnel, equipment, money, information) adequate for implementing this idea?
2. Do others possess the motivation and commitment needed for successful implementation?
3. Is the idea likely to encounter “closed thinking” and/or resistance to change in general?
4. Are there procedural obstacles that need to be overcome?
5. Are there structural obstacles in the organization that need to be over-come (e.g., communication channels that might block implementation)?
6. What organizational or managerial policies will need to be overcome?
7. How much risk taking is likely to be tolerated by those responsible for implementation?
8. Are there any ongoing power struggles within the organization-even if unrelated to the idea-that might block implementation?
9. Are there any interpersonal conflicts that might prevent or hinder the idea from being put into action?
10. Is the general climate of the organization one of cooperation or distrust?”

(VanGrundy, 1988, pp. 225 - 256)