Whatever issue you are faced with, some steps are fundamental:

* **I**dentify the problem
* **D**efine the problem
* **E**xamine the options
* **A**ct on a plan
* **L**ook at the consequences

This is the **IDEAL** model of problem-solving.

The final stage is to put the solution you have decided on into practice and check the results.

**Developing your analytical and problem-solving skills**

**Most problem-solving skills are developed through everyday life and experience.** However, the following interests and activities may be useful in demonstrating a high level of these skills - this may be particularly important when applying to employers in areas such as engineering, IT, operational research and some areas of finance.

* **‘Mind games’** such as cryptic crosswords, Sudoku, chess, bridge, etc;
* **Computer games** – the best of these can involve strategic planning, critical and statistical analysis and assessing the pros and cons of different courses of action;
* **‘Practical’ interests**such as programming, computer repairs, car maintenance, or DIY;
* **Working with sound or lighting equipment**for a band, event or show;
* **Academic study**: evaluating different sources of information for essays, designing and constructing a ‘microshelter’ for an architecture project; setting up a lab experiment.

**There are several stages to solving a problem:**

**1) Evaluating the problem**

* **Clarifying** the nature of a problem
* **Formulating**questions
* **Gathering** information systematically
* **Collating** and organising data
* **Condensing** and summarising information
* **Defining** the desired objective

**2) Managing the problem**

* **Using the information gathered** effectively
* **Breaking down a problem** into smaller, more manageable, parts
* Using techniques such as **brainstorming** and lateral thinking to consider options
* **Analysing these options** in greater depth
* **Identifying steps that can be taken** to achieve the objective

**3) Decision-making**

* **deciding between the possible options** for what action to take
* **deciding on further information** to be gathered before taking action
* **deciding on resources** (time, funding, staff etc) to be allocated to this problem
* See our [**page on decision-making skills**](https://www.kent.ac.uk/careers/sk/decisionmaking.htm)

**4) Resolving the problem**

* **Implementing action**
* **Providing information** to other stakeholders; delegating tasks
* **Reviewing progress**

**5) Examining the results**

* **Monitoring the outcome** of the action taken
* **Reviewing the problem and problem-solving process** to avoid similar situations in future

At any stage of this process, **it may be necessary to return to an earlier stage** – for example, if further problems arise or if a solution does not appear to be working as desired.