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CAF: Consider All Factors

THE FACTORS INVOLVED

CAF is a crystallisation of the process of trying to consider all the factors in a situation. **This thinking operation is essentially related to action, decision, planning, judgement, and coming to a conclusion.**

People naturally assume that they have considered all the factors, but usually their consideration is limited to the obvious ones. Turning **CAF** into a deliberate operation switches attention from the importance of the factors to looking around for all the factors. Clearly it is difficult to consider all the factors, so in the teaching situation consideration can be limited to the ten most important factors (or any other number), or the lesson can be taught in terms of:

- the factors affecting oneself
- the factors affecting other people
- the factors affecting society in general.

This gives the lesson structure.

The emphasis of the lesson is on the factors that have been left out in a decision, plan, etc. In doing a **CAF**, students try to ensure that all important factors are listed in looking at each other's thinking, students try to spot which factors have been neglected. The **CAF** may be applied to one's own thinking as well as to the thinking of others: "What factors have I left out here?"

CAF differs from PMI in that PMI is a reaction to an idea whereas CAF is an exploration of a situation before coming up with an idea. The two do sometimes overlap because some of the factors that have to be considered obviously have a plus or minus aspect. The intention with a CAF is to be as complete as possible and to consider all factors rather than looking at them in terms of favourable or unfavourable factors.

See student's notes for an example of what happened when a big city's traffic planners failed to do a CAF and left out a very important factor.

(*CAF = Consider All Factors:

When you have to choose or make a decision or just think about something, there are always many factors that you have to consider. If you leave out some of these factors, your choice may seem right at the time but will later turn out to be wrong. When you are looking at other people's thinking, you can try and see what factors they have left out.

EXAMPLE

Some years ago in a big city there was a law that all new buildings had to have large parking lots in the basement so that people working in the building would have somewhere to park. After a while this law was changed because it was found to be a mistake. Why?

They had forgotten to consider the factor that providing parking lots would encourage everyone to drive in to work in their cars and so the traffic congestion on the road was worse than ever.)

(NOTE: Logically it could be argued that CAF should come before PMI, since CAF includes PMI as it includes C&S, OPV, etc. But the PMI is the easier lesson to teach, so it comes first.)

The CAF lesson is a difficult one to teach because it is difficult to try and consider all factors. The emphasis must therefore be on what has been left out. For instance, each group tries to find factors that have not been put forward by the "designated group."

PRACTICE

(see *Practice section of student's notes (B)*)

Normally practice items 1 2 and 3 are used one after the other. But for any one of these the teacher may choose to substitute items 4 or 5. The students should work in groups.

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4. What are the factors involved in choosing your hairstyle?
5. If you were interviewing someone to be a teacher, what factors would you consider?
- 6.** The textile workers in a country demand protection from foreign imports which are coming into the country at a lower price and taking over the market. What factors should a government consider in this matter?
- 7.** There is a plan to turn a golf course on the edge of a growing town into a new shopping centre. This is backed by business and the consumers but opposed by the environmentalists. What factors should be considered in the final decision?)

PRACTICE ITEM 1.

(* A husband and wife go to buy a used car for their family. They consider all the following factors:

- That the person selling it actually owns it.
- The price of the car.
- The type of car and the colour.
- The engine power and the speed of the car.
- That all the mechanical parts are working perfectly.
- That it is big enough for the family)

The groups spend 3 minutes trying to find factors which the couple buying the car has left out. The teacher then asks one group to give its findings and the other groups can then add other factors.

Suggestions:

- Their children may not like the car.
- Although they can afford to buy the car they may not be able to afford to run it if the gas consumption is very high.
- The car may not fit their garage (if they have one).

PRACTICE ITEM 2.

(* Do a full CAF on the factors involved in choosing a career.)

Here the groups consider all the factors involved in choosing a career.

They should spend 5-7 minutes on this. At the end of this time the teacher designates one group to give its output and then the other groups and individuals can add further points. If possible and if there is time the points can all be listed on the blackboard and each group can pick out the four points it considers to be the most important.

PRACTICE ITEM 3.

(* An inventor has invented a breakfast pill which is very tiny but contains all the food and vitamins you need. After you have eaten the pill you do not feel hungry for five hours. Should this pill be allowed? What are the factors involved?)

This is a quick item. The teacher gives the starting signal and in the next two minutes each group must pick out as many factors as it can. The groups who say they have picked out the highest number then give their output to which the others can add. This is a race to pick out the most factors in the shortest time.

Suggestions:

- Can one be sure that the breakfast pill contains all the food ingredients even the ones we do not know about?
- What would happen to all the farmers, food manufacturers and shops?
- There would be no dishes to wash.
- You could have your breakfast while going to work.
- Breakfast would not be very enjoyable and people need enjoyment.
- Would people's stomachs shrink?
- If the pill was useful for breakfast wouldn't it be useful for every meal? Would this be safe?

PROCESS

(see *Process section of student's notes (A)*)

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Discussion:

- Is it easy to leave out important factors?
- When is it most important to consider all factors?
- What is the difference between PMI and CAF?
- What happens when other people leave out certain factors?
- Do you need to consider all factors or just the important ones?)

Open discussion with the class as a whole acting as individuals rather than groups.

- Is it easy to leave out important factors?
- When is it most important to consider all the factors?
- What is the difference between PMI and CAF?
- What happens when other people leave out certain factors?
- Do you need to consider all factors or only the most important ones?

PRINCIPLES

(see *Principles section of student's notes (A)*)

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- A. Doing a CAF is useful before choosing, deciding or planning.
- B. It is better to consider all the factors first and then pick out the ones that matter most.
- C. You may have to ask someone else to tell you whether you have left out some important factors.
- D. If you have left out an important factor your answer may seem right but will later turn out to be wrong.

E If you do a CAF on someone else's thinking you may be able to tell the person what has been left out.)

The groups look at the list of principles given in the student's notes. They are asked to pick out the principles they think most important. The groups can also be asked to criticise any one of the principles or to make up a principle of their own.

PROJECT

(see *Project section of student's notes (B)*)

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1. What factors should you consider in designing a chair?
- 2.** A young couple is undecided whether to get married at once or wait. What factors should they be considering?
3. In deciding how to spend your vocations, what factors would you consider)

When only a single period is allowed for the lesson there will not be time for this section. The project items can be used as essay subjects or given to the students for them to work on in their own time. In longer lessons the group can work on a project item chosen by them or the teacher as described in the Standard lesson format section.



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