Method in Critical Thinking

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The OnePage method aims at improving critical thinking together with establishing a clear perception of the disutility of direct information transfer from the internet.

Internet has greatly affected course assignment study methods. An assignment typically begins by a search for information in Google. When suitable hits are found, material is transferred to the assignment. To what extent that material is edited and refined for the relevant use depends on the motivation and competences of the student. In many cases the material found in internet directly defines the contents of the assignment while a more beneficial use for the information would be as a source serving the thought processes of the student. Yet it is the thought process that becomes bypassed, when time and resources are limited.

We assume that we are learning while in fact we are only transferring information from one place to another. Learning becomes externalised as the reward, that is, the received grade reflects the quality of the source material, not the student’s own reasoning. What’s the point in time and energy consuming thought processing when you can receive good grades in a more cost-efficient manner?

Information transfer might otherwise appear as a handy study method, if only there weren’t a major inbuilt problem with it: The World Does Not Value Manual Information Transfer! Organisations do not search for graduates who know how to google, they search for those who are able to process information and create new knowledge using capabilities we learn only by thinking and reasoning in a costly manner.
I have read course assignments for many years and it is easy to see how extrinsically many students deal with knowledge. The aim is simply to fill empty pages with text and figures to fulfil some external requirements. The OnePage method recognises the meaninglessness of such information transfer and replaces it with a more intrinsically rewarding method of creating one’s own ideas and using one’s own reasoning and personality when writing assignments. The intrinsic reward comes from the nature of the mind itself being curious and looking for meaningful things in life.

By limiting the treatment of any topic to one page makes it possible for a student to really process things in their own mind as they are not required to fill several pages with copied material. The page limit makes it useless to transfer material directly from internet as the space is needed for creating meaningful personal treatment.

Students report both joy and hardship. Joy arises whenever we are experiencing something authentically true to us. We all know what learning feels like when our thinking is genuinely affected and our perception of reality changes. What makes the method difficult is the fact that authentic learning takes energy and effort, and also skills that we are not necessarily so familiar with.

The OnePage method aims at training particular type of skills that are rare and known to be valuable throughout our history. Those skills operate at the meta level, meaning they are valuable for us in all instances, throughout the world, and for the entire duration of our lives. The skills are cognitive, meaning they are connected to our ways of thinking, and they produce something called critical thinking, for which the world is willing to reward you abundantly. If you understand what the above sentence
indicates, I need not explain the logic of reality in any greater detail. What I do need to explain, however, is what critical thinking is and how it operates, and especially how it can be trained by this method.
Critical thinking

The concept of critical thinking may bring many kinds of sensations; some may consider critical thinking as something to be avoided simply because criticism feels unpleasant due to its common usage connected with fault finding and critical judgement. We don’t generally like to be criticised.

Critical thinking is however, when properly perceived, central to the very sense of being human because it facilitates knowledge about us and our environment. Paradoxically, the modern person can live quite easily without connection to critical thinking because we are utilising knowledge that has been created by critical thinking of others before us.

The urgency of critical thinking becomes highlighted in our time of increasing flow of (dis)information which decreases our ability to make sense of the world. People have increasing difficulties in distinguishing between real and unreal, between causes and effects, etc. So, the task at hand can be argued to be both vital and urgent.

There are many ways we can categorise elements of critical thinking. I will provide here a simple taxonomy that directs our attention toward the operation of the mind. There is plenty of literature on the subject, so for those of you who want to dive into the world of critical thinking, a whole tradition is to be found going through the Greek philosophers (500 BCE*) in the West as well as the Buddhist thinkers (also 500 BCE) in the East.

* BCE = Before the Common Era.
Critical thinking is connected to us in two ways: as 1) an inherent inclination or trait we are born with and as 2) a skill that can be practised and cultivated. All of us benefit from the practice as the results are life-changing and there is no limit to be found beyond which your mind could not penetrate. Critical thinking contains 4 elements that we need to focus and practise here:

❖ Flexibility of thinking and open-mindedness
❖ Abandoning our earlier opinions, beliefs and (pre)conceptions
❖ Creative thinking
❖ Reflexivity

Flexibility refers to acceptance of new information as candidate for knowledge. We need to be both open and alert at the same time which makes our practice both interesting and demanding. Accepting new information without scrutiny would be uncritical thinking and rejection without proper inspection would manifest rigidity of thinking. So, we need to administer a proper balance between them, and that takes practice. Readiness to abandon false (pre)conceptions and ideas is also important. We need to practise to learn when and with what type of evidence ideas should be dismissed. Most importantly, we need to find causes for both accepting and dismissing ideas and conceptions; and these causes need to be credible and valid foremost to ourselves and secondarily to others.

Creative thinking enters the picture when we examine information. Newly adopted information requires interpretation; we need to fit the new elements into the existing structure of our knowledge. Both the newly adopted information and our knowledge structure are adaptable to some extent. How and to what extent each adapts to the other depends on the elasticity of our minds.
Creativity helps us to spontaneously connect between conceptions and create further ideas. And as soon as this is said, in marches the reflexive guard who needs to investigate that we are not doing anything entirely silly. Reflexivity refers to a thought process by which we make our thinking intelligible to ourselves. Without reflexivity we would never learn how we come to learn things and how we come to think of things we do. Without it we would remain victims in our own lives, disconnected from the decision-maker who we should become.

It is entirely possible to live through our lives without a clear understanding of how our main cognitive capacity operates in the world of ideas, feelings, opinions, (pre)conceptions and knowledge. Critical thinking is a two-way arrow; one end points outside and the other inside of us. By practising critical thinking we learn not only about how the world operates but more importantly how we ourselves operate in the world. Through diligent practice self-knowledge arises and mastery in it liberates us. That should be something worthwhile (beside the tiny side-effect of the world rewarding anyone with this capability).
Assignments

In this section my purpose is to explain how to write course assignments utilising the OnePage critical thinking methodology. First, work on the assignment needs to be divided into two distinguishable and separate phases:

1. Research phase
2. Reporting phase

These two phases need to be kept separate because they serve different purposes and problems arise whenever writers mix these phases: a hasty writer may try to construct her page while still investigating, when things appear anything but clear to her. She ends up constructing the page by the use of reasoning provided by others (in the internet and elsewhere).

The research phase begins by studying the theories and models given in the assignment. These theories and models serve a purpose and the aim of the student is to understand how they operate and how they are related to other things.

The research phase requires extensive use of internet and databases. When going through articles and texts one is constantly bombarded by ideas and arguments provided by their authors. How is one to know what to believe and what to reject?

The less we initially know about something, the more disordered new inputs of information may appear at the beginning. By going through a number of different sources, recurrent patterns start to appear, however, and order begins to take shape. But this does not happen automatically, or without effort. Consider two different types of attitudes toward things we come across and which
are new to us. First one can be called “short-term cost-minimisation” because anyone following this principle will systematically discard anything they are not already familiar with. They do so because it saves costs in the short-term as investigation necessarily involves effort and use of energy. The second type of attitude can be called “long-term improvement” because this person does not see the short-term cost as a cost at all, but instead, as an investment. Her inquisitive mind collects constantly new inputs and her categorising capacity rearranges phenomena into new orders. In time these constantly reshaping orders correlate with reality to a degree unattainable by any cost-minimising principle.

The research phase comes to a close when a plan, a strategy starts to take shape. The writer understands now how the concepts and models of the assignment operate and how they can be applied in a real world setting, and how they can help us make sense of phenomena inside and outside of organisations.

The research phase may have accumulated much material and now the writer has to carefully choose what to include in the report. A common tendency needs to be resisted where everything one has collected is poured into the report for the reader to pick and choose. The page limitation is there to drive the writer to critically think and select when constructing the page. One cannot say everything there is, so one needs to have a meaningful plan to what one wants to say.

There is a general pattern to be followed when applying critical thinking to economic phenomena. Our task is typically to apply a given theory or model in an empirical setting and analyse its intended and unintended consequences. An analysis consists of examination of causal
relations between phenomena. The writer’s task is then to show how different things lead to other things and thus how the model operates in reality. The reader is interested in seeing how the mind of the writer perceives and differentiates things, how it reasons and concludes, what type of things it takes for granted and how it provides evidence. Much too seldom a train of thought can be found going something like this: “This happens for the following reason ...”.

When searching for relevant information for assignments, we need to use sources (often in digital form) extensively. The OnePage method does not do away the need to filter information, it only advises us not to present discovered information as an outcome of our own learning. However, we need to google extensively in order to create a solid understanding of the arrays of applications of models and theories. However, googling alone does not always bring information of expected quality, so we may need to use databases that contain edited articles and journals as well. To what extent this is so depends on the subject at hand.

Since we need to use referential information when constructing our assignments, referencing standards come into play. And since our OnePage method limits the space available, we don’t want to waste that limited space by listing references at the end of each assignment, that is, at the end of each page. Instead, we attach a separate list of references at the end of the course report containing references of all assignments.

Listing references in a standard way at the end of the course report should be unproblematic. How about the other end of a reference, the one in the text, inside brackets, like (Kaisla 2012), what should we do about those? This
question may sound silly to those who know what referencing is all about, but around 50% of students do not make any in-text references. They simply create a list of references at the end of the report and consider the job done. The in-text reference is of course what the whole business of referencing is about. By the exact placing and style of that reference marking we show the reader how we are using the source information.

Contrary to the reporting guidelines of the school, the overall layout of the course report can be designed to stand out in the crowd and attract the reader. This is because visual design can be an important sales factor and training in that competency is also beneficial. Another central guideline deals with the tiny but important detail of row height. Use only row height of 1 and not the 1.5 as instructed in the reporting guidelines of the school. The rationale for this should be self-evident as our space is limited to one page only (and besides the 1.5 row height is a residual from the stone age when space was needed between the lines in hard copies).
Lectures and discussions

Our courses consist typically of lectures or discussions and assignments that are pursued in groups or individually. The spirit of lectures varies greatly, depending on various elements, such as skills and moods and motivations of the students. To enhance our mutual understanding of the purpose of lectures, let us look into their nature a bit.

Lectures are essentially about thinking together. This means we get together to think and exchange our understandings and views on themes by the method of reasoning. Critical thinking can on the one hand be active exchange of views and arguments among the participants, yet on the other hand, it can be silent reflection while the teacher opens new themes and horizons. The thing that connects all variations of critical thinking is our concentration on a mutual theme which is moving and developing during the discourse.

What I said about the nature of lectures above looks fairly easy and straight forward to understand. Yet in reality pursuing such a simple goal can sometimes be extremely difficult. Concentrating on a theme and listening to what other people have to say can become tiresome, especially if one’s mind is not engaged. Degreasing span of concentration is a universal topic in education. A popular remedy is to bring entertainment, replicating tools and methods students already enjoy using such as games and gadgets.

Critical thinking operates contrary to entertainment factors, however, because if it did not, everyone would be a millionaire. Critical thinking becomes developed by critical thinking, and it is precisely with this skill that students are
at their weakest. If you have never experienced independence in thinking, accepting your self as the primary source of the thinking activity, it is very hard to perceive how it works. I cannot blame the students for not having been offered something that should have been throughout their schooling: The European Union has in 2006 put critical thinking into the centre of life-long learning capabilities. Yet, instead of promoting independence of thinking, universities educate politically correct followers. How do I know this? I have met countless students in and from universities around the world, and if they collectively lack something, it is independent and reliable thinking.

What could explain this systematic deficiency in the very core of capabilities that we should master? The answer lies in how conventions operate in this world. See, many teachers themselves have no experience of critical thinking because they have gone through the same domestication that they now offer to their students; that learning is about collecting and memorising facts about reality as presented in books and elsewhere.

Sometimes students may be confused about the task of the teacher in this era of information overflow. They may wonder why the teacher doesn’t provide them with a ready-made path to “the correct solution”. The task of a teacher becomes clearer when we understand how this thinking together operates. There needs to be knowledge present to give guidance to the moving themes, but what is essential in learning is the personal processing of thoughts interconnected with the shared ideas of the group. Thus solutions may vary, but the central point is how we arrive at our own conclusions, that is, how we construct our very own path of reasoning, starting from an open question and ending somewhere we can, looking back, clearly see the
realistic explanations and justifications for our reasoning. We are inescapably and mutually *interdependent* but the only one who can make this world understandable to us is *our own mind*.
Assessment

Since critical thinking is a meta cognitive skill, assessment emphasises capabilities that are trained when thinking critically. The following are central elements of assessment in the OnePage method:

1. Capability to understand assignments’ purpose
2. Capability to discern causalities
3. Capability to provide evidence
4. Capability to provide credible arguments
5. Capability to conclude and create one’s own ideas
6. Capability to construct a coherent and consistent page

The method creates some requirements for the design of assignments as well. Assignments need to be open-ended in the sense that there is no predetermined or exact “correct answer” toward which students should navigate if they are to succeed. If a mainstream idea of assessing knowledge refers to the correspondence between the endpoint reached by the student and the predefined, correct interpretation by the supervisor, in critical thinking methodology, it is the journey itself which is the object of assessment. This fits well to business economics because we have a way too long history of pretence of knowledge in this field already.
Frequently answered

How to know whether or not one is on the right track when applying the OnePage method?

1. Do not just present what others write or say about a subject (in books, articles, internet, lectures, etc.).
2. Do not construct your page before the research phase is properly finished.
3. Do not construct your page before you know what you want to say.
4. If you do not know what you want to say, it means you are not yet ready for it, so keep researching.
5. A moment comes when you quite naturally connect separate ideas and are able to perceive what the assignment is about; this of course does not come without effort.
6. Then collect your ideas and write a coherent page.
7. Do not try to fit in all the possible ideas you may have; the method is not about that.
8. Think of the page as a complete whole in which you only say what is truly important and meaningful.
9. Your reader is knowledgeable, so you can rely on their wisdom.
10. Aim at mastery of your thinking and use the white canvas to show it to the reader.
11. Apply the timeless method of critical thinking throughout your processes of thinking and expressing.
12. Do not accept information without scrutiny; especially direct your examination to your own thought processes. What can you really say you know and how do you come to know it?
13. When you truly feel you know it, then it is yours.
14. Be the best and toughest reviewer of your own thinking.
15. Remember, critical thinking does not aim at becoming perfect; its goal is to open to more questions.

For further information, visit:
https://jukkakaisla.fi