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To cultivate the analytical mind for student in order to attain the proper research in higher studies

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Successful entrepreneur Warren Buffett named analytical skills among the most important skills for young people to become successful.

One of the top five abilities that businesses, firms, and organisations throughout the world Commonly look for is analytical ability. As a result, the best colleges in the world try to set themselves apart by emphasising the development of analytical abilities.

But even while many students are eager to hone their analytical abilities, they frequently find it difficult to do so and to employ such abilities in real-world settings.

Knowledge of Analysis (With Steps And Benefits)

Analytical abilities may be generally useful in many aspects of life, notably in specific Professions like science, research, and data-related industries. By adopting basic regular practises into

their routines, people can increase this talent. combining intellectual abilities with daily tasks
Reading more You may learn about circumstances through reading that you would never have the

opportunity to experience yourself. It inspires imagination and encourages original thought, Pay closer

attention to the world around you, even the smallest aspects, since doing so may help you better understand how things work. Gain new knowledge When you acquire a new skill, your mind may expand and grow. You can begin by learning skills that have long piqued your interest but for which you previously lacked the time. Attempt to resolve issues Typically, in order to solve a problem, you must first consciously investigate it and comprehend its sources and effects. Keep a notebook Keep a journal where you may record the occasions and circumstances you come across during the day and how you handle them. Describe your feelings and ideas around them in as much detail as you can.

An approach to the analytical process may be: Determine the issue. assemble the essential data from all pertinent sources. Gain a deeper comprehension of the problem. Invent fresh approaches and solutions.

Implement fresh approaches. Examine, evaluate, and test the success of the recently implemented solutions. Use trial and error to generate any more necessary solutions based on the findings. Here is another method for data analysis that involves less stages but adheres to a lot of the

same principles: Set up your inquiries. Establish precise measurement priorities by dividing them into what needs to be measured and how it should be measured. assemble fresh data. examine fresh data. Interpret the new data's findings. We employ analytical abilities more frequently than we may know, and most of the time we don't even stop to think about it.

This is due to the fact that professionals may apply these abilities outside of data science in general applications. Analytical thinking is used whenever we observe, understand, and create new ideas. Critical Analysis Critical thinkers are able to analyse a situation or problem and come to a conclusion on how and why the issue is there. The first crucial stage in creating workable answers is the capacity to comprehend the whole complexity of the issue. Critical Analysis

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Curiosity

Why are things set up in this way? What drives events? A data analyst has to have a keen sense of curiosity and a willingness to learn more in order to address issues. Data science requires the analysis and interpretation of numerical data, and in this profession, active curiosity is highly valued.

Research Until you locate the data, you cannot make wise judgements based on data. As a result, it's critical to be able to find data from reliable sources, making great research skills a

necessary quality for data scientists.

Tenacity Particularly in the field of data science, not all issues are simple. There are many levels to issues, and each one is complex in its own way. People may give up occasionally as a result of the intricacy and lack of a clear, straight path. Strong analytical abilities entail

seeing beyond one topic at a time to create a more coherent understanding of the complexity of a situation.

Observation of Details It's simple to overlook nuances that can be crucial to a project's

success when working with enormous data sets. Successful data scientists utilise their abilities to pay attention to detail to sort through mountains of data and pinpoint and use the most crucial data sets.

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Foresight finding answers, understanding the larger picture, and looking forward to identify how a current problem may effect the firm one, five, or even ten years from now are all part of data science. Data scientists are able to extrapolate future possibilities from current Findings.

Excellent Interaction Skills Successful data scientists continually hone effective communication skills throughout their careers. They must be confident in the facts they offer and convey it in language that the average person can comprehend because they frequently transmit crucial information to executives and stakeholders. You have the ability to develop the most useful, implementable solutions ever seen in IT. Nevertheless, such ideas won't be implemented until you can communicate that knowledge to the decision-makers.

Knowing How to Explain the Big Picture This may be categorised as a part of "good communication." Data scientists have the rare capacity to take data that might first appear inconsequential and turn it into a narrative that explains how it will have an overall influence, even in contexts that one might not ordinarily consider. Solving issues In order to come up with the optimal answer, a skilled data sciences specialist can examine a problem from several perspectives.

Making Decisions Every day, many choices are made quickly by data scientists. For this, you need to be able to make decisions with strength and assurance. Sense in business Data scientists use the knowledge they have gathered to provide practical business solutions. They must thus comprehend the nature of the industry and the particular business they are engaged in.

Sense in business Data scientists use the knowledge they have gathered to provide practical business solutions. To develop the greatest solutions, they must comprehend the nature of the industry and the particular firm they are involved in.

Writing Maintainable, Efficient Code Data scientists need technologies that process and analyse data because they deal with data. A smart data scientist must be familiar with programming languages in order to develop algorithms, scripts, and APIs for data collection and preparation.

1) Recognize the meaning of "analytical skills." Analytical abilities have as many different

definitions as there are practical uses for them. The majority of experts, educators, and trainers generally discuss the capacity to process information deductively and/or inductively. In order to see the wider picture or trend underlying statistics, it might occasionally help to be able to gather, visualize, and analyse information. In other instances, it is the capacity to

break down large chunks of data of a situation in order to uncover the specifics and the underlying patterns or connections that link them.

2. Take part in student projects that include analysis. Nearly every year, my students collaborate with partner universities on in-class projects that are practical policy-related. For instance, as part of a project, we examined the technological parks in Silicon Valley and evaluated how well they compared to research universities in Kazakhstan. In order to understand how the innovative system actually functions in technoparks and what should be done to draw lessons from that experience, it was thought that it would be helpful to break down large chunks of data about the success of several technoparks in the San Francisco area.

3. The main goal is to develop a big picture for the university and for all interested and motivated student-startuppers about how to increase the efficiency of their startup projects and discuss the creation of creative and practical networks and infrastructures of technoparks, in addition to practising analytical tools and analytical work at our MDP/Global Classroom programme.

4. Begin with a defined structure. There is sometimes a propensity among students to get right into analysis when we discuss building analytical abilities and applying them to our assignments. However, in order to produce strong analytical work, students must adhere to a set of rules, guidelines, and a predetermined strategy. This is crucial in the age of the information revolution since there is frequently an excess of knowledge available on significant subjects. I always advise my students to read textbooks, articles, and other materials to come to a common understanding of the general types of analytical skills and analytical tools that we need for our projects as a starting point and to not skip the first step.

5. Pay attention to the analytical abilities necessary for the assignment. The second guideline I have is that students must also acquire analytical abilities that are subject- or project-specific, or even multidisciplinary. Students at Al-Farabi KazNU required to have multidisciplinary analytical abilities when they were evaluating tiny technoparks in Kazakhstan. This is due to the fact that the study on KazNU and other technoparks needed analysis of both the management, commercial, and legal elements of triumphs and failures in addition to the policy component of creating and managing these technoparks.

6. Regularly work on your analytical abilities. The ability to acquire, hone, and practise analytical abilities on a regular basis to preserve the calibre of analysis and, in fact, the calibre of the analytical mind, is one secret to long-term success in analytical work. Some individuals argue that the ability to think analytically is a talent bestowed by nature, while others contend that an individual's intellectual surroundings mould this ability. Both of these presumptions, in my opinion, are incorrect; analytical capabilities are abilities that may and should be viewed as soft technical skills. Therefore, it is important to practise these skills on a regular basis. These exercises can range from mind games like Sudoku, chess, and computer strategy games to academic studies where a student analyses various bits of information.

7. Identify the helpful analytical tools. Students can gain specialised analytical techniques that will help them to execute a successful analysis for group projects (and for solo efforts too). Our MDP/Global classroom students at Al-Farabi KazNU frequently employ a method known as the analytical decision tree. In policy research, particularly in the examination of

decision-making, an analytical decision tree is frequently utilised. In order to establish a plan to achieve desired goals, this analytical tool employs a graph or model to analyse the chain of actions and their potential repercussions and visualise them using a tree-like graphic that focuses on policy/action outcomes and resource costs.

8. Look for suggestions and fresh ways to improve. In my class, creative students frequently explore for novel ways to hone and improve their analytical abilities. Working on group projects, debating them inside the group, and presenting them to a broader audience are some of the finest methods to learn. Positive and negative comments, or "bouncing ideas," from coworkers or acquaintances can be used to gauge ones analytical abilities and guide efforts on honing and enhancing them. Lee Iacocca, a well-known businessman and expert in practical management, famously said You can have brilliant ideas, but if if you cant get them across, your ideas wont get you anywhere