

Crux of Time Management for Students

Felix Bast

At the beginning of each academic session, I typically devote a class or two to share my tips on time management and personal productivity with newly admitted students at the Central University of Punjab. I believe this is a crucial first step for students, as the curriculum hardly contains any information on either. I also notice that an article on this important theme is altogether non-existent. In this write-up, some of the most important methods of time management and personal productivity are thoroughly reviewed before concluding with a few pedagogical suggestions for teachers to ensure that their students manage time efficiently and be more productive with their studies and research.

Prioritization

At the heart of time management lies prioritization of tasks, spending time on the right things and not meaninglessly meandering on things that come by [1, 2]. I have seen a number of students who study ‘very hard,’ yet their perseverance does not get translated to academic performance. Students are continuously bombarded with assignments, term papers, quizzes, class tests, etc., to such an extent that they – those who do not manage their time wisely – hardly find any time for enjoyment. Having free time when you do nothing but enjoy, (for example, curl up in your bed on weekends reading a good book), is of paramount importance to personal productivity, as it aids in getting rid of stress levels, and boosts creativity. To find free time, students need to spend their time *smartly* rather than *hardly*. For prioritization, we need to differentiate between tasks that are important and those that are urgent, as originally conceived by Dwight Eisenhower, 34th US President, who once famously stated: “What is important is seldom urgent and what is urgent is seldom important.” He came up with a matrix, now commonly referred to as the ‘Eisenhower



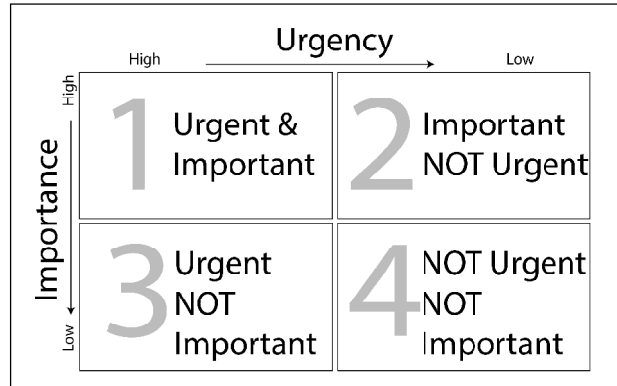
Felix Bast holds a PhD in molecular phylogenetics from MEXT, Japan and works as Assistant Professor at the Central University of Punjab. He is a regular writer for Indian popular science magazines including *Resonance* and *Science Reporter* and has published many popular science books. His latest fiction for young adults, ‘*The Arctic Circle*’ presents unabridged techniques for students for time management and personal productivity, and is available via Amazon.in. Some of those methods are reviewed in this write-up.

Keywords

Bibliography, Cornell method, Eisenhower matrix, events, personal productivity, Pomodoro technique, procrastination, scheduling, SQ3R method, tasks.



Figure 1. The Eisenhower matrix.



matrix’ for prioritization of tasks, as given in *Figure 1*. The matrix is divided into four quadrants, and these are explained below:

1. Tasks that are urgent and important: For example, a house fire, emergency beeps from lab equipments (such as autoclaves, centrifuges, etc.), school term paper deadline, household chores, etc., be immediately attempted. But most of these tasks can be avoided with a bit of planning and organization. For example, take precautions to prevent a fire, work on term papers regularly to complete them well in advance, and follow a weekly schedule for doing household chores. Spend as little time as possible.

2. Important, but not urgent tasks: These are the most important of all on which ideally the person may try to invest most of the time. For example, weekly and long-term planning, studying, developing a skill, reading books, writing a book, performing a scientific experiment, careful analysis of the experiments, writing a manuscript, etc., be attempted with a deadline. If you can do it in 2 minutes, just do it (do not schedule) – for example, reviewing five Spanish flashcards, or learning one Japanese *kanji* character. If it takes more than 2 minutes (or if you have a more urgent thing to do), schedule it. Complete these important tasks before they becomes urgent as well, and move to quadrant 1. Spend most of your time on this.

3. Urgent, but not important tasks: Some examples are help



requests, text messages, phone calls, most of the emails. Consolidate such help requests (for example, colleagues requesting for a publication, etc.) so that responding to them is scheduled, rather than allowing these tasks to become frequent interruptions. Try to defer persistent interruptions as much as possible (gently apologize that you cannot help because you are doing something important). If not, try to delegate (transfer the task) to someone else. Observe brevity while responding via email or speaking on the phone. Rather than frequently checking for emails/texts (or allowing automatic notifications to interrupt you), it is suggested to schedule these tasks. For example, checking for emails and responding to them can be scheduled for twice a day, say morning and afternoon. Spend as little time as possible.

4. Tasks that are not urgent and not important: For example, entertainment, playing videogames, watching TV, surfing the internet, Facebook, etc., may not be dwelled upon for a long time, just dump it.

For students who are new to time management, most of the tasks belong to Quadrants 1 and 3; for example, an assignment or term paper. As explained, most of these tasks can be completely avoided as we master managing time by scheduling the task, persistently attempting a larger project bit-by-bit every day, and by daily and weekly reviewing.

Hard Work vs. Smart Work

Generally, students have a preconceived notion that hard work is the most important skill for academic success, but in reality it is not. Indian-born British writer George Orwell satirically captures this essence in his book, *Animal Farm* with Boxer the horse, whose hard work causes all the problems in the farm. It is now universally accepted that working smart and making slow but steady progress on the right things are much better than pointless slogging. By *right things*, I mean important tasks that aid in long-term value accretion, skill cultivation, and creativity that belong to the second quadrant of the Eisenhower matrix.

Most of these tasks can be completely avoided as we master managing time by scheduling the task, persistently attempting a larger project bit-by-bit every day, and by daily and weekly reviewing.



An entertaining, yet efficient, method for sticking with productive habits is by ‘Seinfeld’s unbreakable chains of dots’, which is rather like a game.

Cultivating Productive Habits

Cultivating productive habits is a critical first step in a student’s life. Habits such as daily and weekly review of what has been learned, scheduling, exercise, eating healthy and so on are some productive habits. Recent research shows that ritualizing the tasks is the best way to be more consistent and stay productive. For example, a typical morning chore can be turned into an amazing ritual in a step-by-step fashion. Even the whole day can be organized by scheduling the recurring tasks, as illustrated in *Figure 2*, which is my personal daily schedule.

An entertaining, yet efficient, method for sticking with productive habits is by ‘Seinfeld’s unbreakable chains of dots’, which is rather like a game. The rules of the game are straightforward – a dot is marked on the monthly calendar if the task is attempted on any particular day, and no dot when not attempted. You are competing with yourself in this game; the aim is to make the chains of dots as unbreakable as possible. For example, if a student wants to make morning walks a habit, she will put a dot on her calendar each day she walks, with an aim of an unbreakable

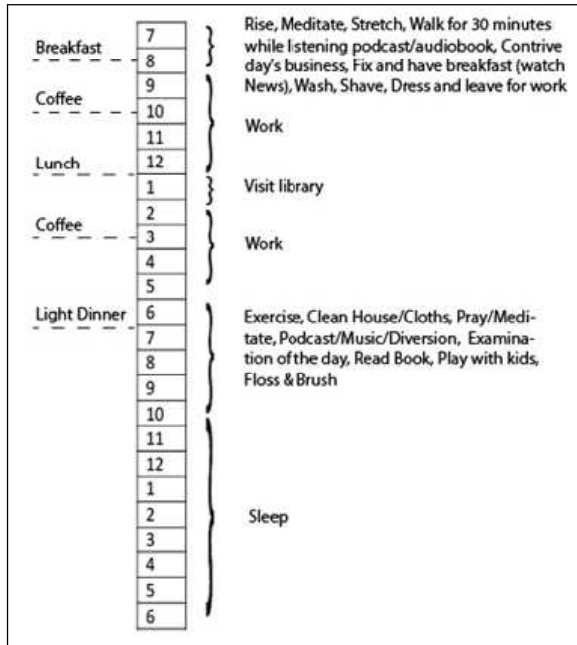


Figure 2. My daily schedule.

chain of dots. If a chain breaks, she begins a new chain to outdo the older chain's length. Another important principle to remember is that getting started with a task is more important than accomplishing it. For example, instead of aiming for 'walking 30 minutes every day', a student can aim for 'putting on shoes and getting out of the main door,' such that a small step towards the ultimate goal is achieved. She can incrementally increase the goal, for example, walking for 10 minutes after a few days, 20 minutes after a few weeks, and 30 minutes after a few months.

Events are specific occurrences of circumstances, while tasks are actionable things.

Scheduling Events and Tasks

Events are specific occurrences of circumstances (such as deadlines, examinations, etc.), while tasks are actionable things (such as exercise, buy notebook, etc.). Tasks and events can be scheduled by a number of methods, one of which (explained below) is a method I have personally adopted. It consists of Google Calendar and Google Keep – two free web-based applications.

For scheduling events and meetings, Google Calendar is very effective. It can mark important events like class timetable, academic calendar, deadlines, and meetings. As it syncs across all devices, it offers many ways to remind the user about upcoming events; for example, as a pop-up notification in Android smartphones, by email, through SMS, and so on. The activation of reminders is crucial for scheduled events. There is a widget called 'simple calendar' on my Android home screen to list forthcoming events, to have a glimpse at my disposal. A lab feature in my Gmail inbox displays a mini calendar. An app named 'Ringer' automatically sets the phone on silent mode during a calendar event.

For scheduling recurring tasks (for example, 'strength training @ the gym every Monday and Thursday'), I use Google Keep – a simple note-taking application. Inside Google Keep, there are options to list items as a checklist (so that you can click on the little rectangle to tick the task as done), and label tasks as recurring based on day of the month (e.g., 'every second



For non-recurring general tasks, it is suggested that the students use a paper notebook.

Tuesday’) and so on. Automatic reminders will be displayed on the mobile phone before a set period (for example, 1 hour before the due time).

To-Do Lists and Weekly Review

For non-recurring general tasks, students may use a paper notebook. To-do lists can be organized on a daily basis, with each item displayed as a checklist. They may spend 10 minutes every morning to brainstorm for that day’s to-do list, consulting Calendar schedule, pocket notebook and weekly review (explained below).

Every Monday afternoon, student may spend half an hour brainstorming ideas and to-do list for the whole week, the ‘weekly review’ – the most important system in time management (*Figure 3*).

During the weekly review, consult the master notebook for incomplete tasks/events/ideas, pocket notebook for any ideas/tasks quickly noted down, Google Calendar for upcoming events, and the trigger list – to remind of possible events/tasks so that particular domains are not forgotten. A trigger list might prompt the reader to identify important events. Below is an example – a simplified school trigger list for students:

1. Long-term goals, and reflection of current status.
2. Important upcoming deadlines: term papers, assignments,

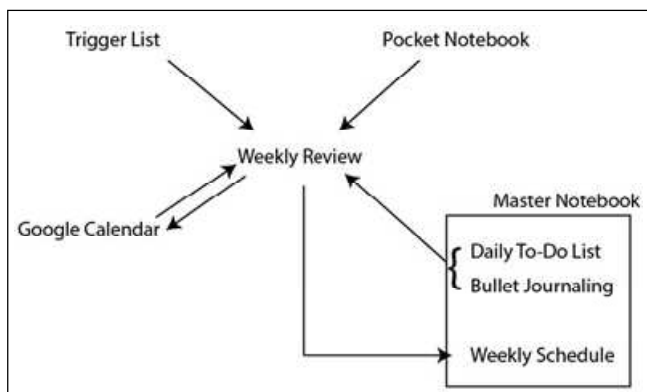


Figure 3. Flow of information in a weekly review.

admissions, scholarships, overseas fellowships (Monbukagakusho, DAAD, Fulbright, Commonwealth, Erasmus-Mundus, etc.)

3. Important upcoming exams: internal exams, end-semester exams, quiz, UGC/CSIR-NET, GRE, TOEFL, etc.
4. Key upcoming conferences.
5. Summer internships and professional networking.
6. Promises/commitments to others.
7. Communications to make: email, telephone, letter, text, social media.
8. Writings/readings to finish: literature survey, articles, popular science, assignments, reports.
9. Financial: tuition fee, dorm fee, textbooks, dining, investments, insurance.
10. Dorm/hostel: rent, maintenance, utilities, clothes, furniture, cleaning/organization.
11. Upcoming events: birthdays, deadlines, holidays, weddings, graduations, vacations, sporting/cultural events.
12. Things to do, places to visit, people to meet, library, supermarket, bookstore, stationery store, volunteering, social service, charity.
13. Health: exercise, sports, nutrition, doctors, dentists, medication, routine screening, routine body weight measurements.
14. To read/listen: books, magazines (*Scientific American*, *New Scientist*, *Resonance*, *Reader's Digest*, *The New Yorker*, *The National Geographic*), newspapers, podcasts, audiobooks, blogs.
15. New skills to acquire: Soft skills, first aid/survivor skills, photography, learning new languages, English communication skills, style, and grammar, mastering new software such as GraphPad Prism, Origin, Adobe Illustrator, ImageJ, MS Excel, learning to code.

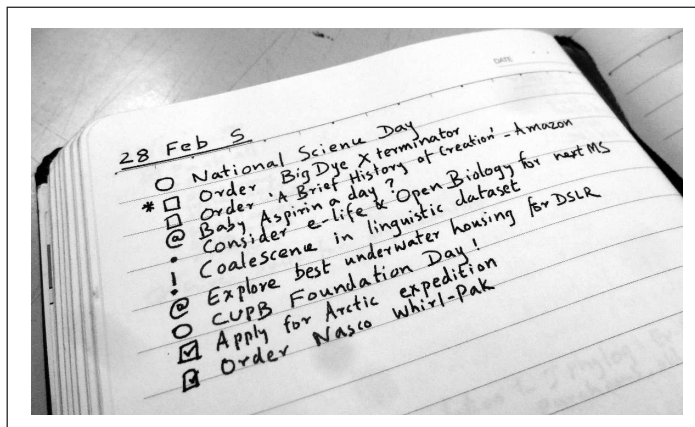
A trigger list might prompt the reader to identify important events.

Bullet Journaling

In addition to to-do lists, students can use their master notebook as the center of personal productivity for jotting down most important things and ideas in the form of journaling. Bullet



Figure 4. Bullet journaling.
Courtesy: www.bulletjournal.com



journaling (*Figure 4*) is a very efficient system of journaling. Students may put a solid dot-bullet (•) whenever new tips or information needs to be noted (ideas, thoughts, observations, etc.), an empty checkbox (☐) for tasks (such as 30 squats, 20 lunges and 30 jumping jacks), and an empty circle (o) for events (deadlines, birthdays, etc.). To prioritize a task, a star symbol (*) can be marked on the left of the checkbox. To lookup the matter later on the internet or in books (for example, a medicine, or a quote), an at-the-rate symbol (@) can be marked on the left. For inspiring ideas, an exclamation mark (!) can be marked to the left of dot-bullet. Entries may be logged date-wise, notebook be paginated, with a nice index page. For more details about this system, visit www.bulletjournal.com.

In addition to to-do lists, students can use their master notebook as the center of personal productivity for jotting down most important things and ideas in the form of journaling.

In addition, students may also use a spiral pocket notebook for quick jotting on the go (for example, ‘to-buy’ checklists, logging car mileage, personal weights, quick idea, tracking expenses, etc.). Students may keep this pocket notebook with a pen by the bed while they sleep; no one knows when a great idea will strike! For capturing and storing information from the internet, MS OneNote can be used. This software has some remarkable features, such as the ability to save everything without the user actually ‘saving’ it, an OCR (optical character recognition) that can extract text from images and so on. OneNote can also sync notebooks across devices.



On the Avoidance of Procrastination

Procrastination – putting off, or delaying, or deferring the tasks indefinitely – is the foe of productivity. There are many ways to deal with procrastination. A significant task such as writing an article can be broken down to doable mini-tasks, and these tasks can be scheduled. Another method is called the ‘Pomodoro technique’, in which a big task is attempted with a timer set at 20 minutes. After 20 minutes of attempting the task, take a 5-minute break. Repeat this cycle four times, then take a longer break of 15–30 minutes.

‘Pomodoro technique’ is one in which a big task is attempted with a timer set at 20 minutes. After 20 minutes of attempting the task, take a 5-minute break.

On Punctuality

Punctuality is a very important component of personal productivity. Unfortunately, punctuality is not given enough priority in cultures of developing countries in general. Having spent five years in Japan – a country where being punctual is considered as part of their cultural etiquette – I can assure the students that this one principle will pay you dividends in the long run. As explained previously, the rigid daily schedule will greatly help to avoid distractions. Always plan to be early; it is better to be *in* time rather than *on* time for events and meetings. Students can also make the best use of alarms in their smartphones to make sure that they are never late for appointments. Equally important is promptness in all tasks, however trivial they may seem; for example, replying to emails, repaying debts, keeping promises or completing a delegated task.

Other Personal Productivity Advices

On Studying Concepts and Facts

Students need to understand that concepts are more important than facts. They are advised to spend more time understanding concepts rather than memorizing facts. Concepts are thought about and understood. For example, ‘angiosperms produce flowers that develop into fruits’, or ‘adverb’ or ‘planet’ and so on. Facts, on the other hand, are specific pieces of information and

Always plan to be early; it is better to be *in* time rather than *on* time for events and meetings.



For memorizing facts, three tricks are noteworthy: saying out loud, flashcards (especially for remembering new words), and mnemonics.

are memorized. For example, ‘Socrates taught Plato, who taught Aristotle,’ or ‘there are 24 alphabets in Greek,’ or ‘Charon is the biggest moon of the dwarf planet Pluto.’

A student may view concepts, or the entire knowledge, as a giant semantic tree; she cannot learn any particular leaf unless she has something to hang on to. She can hang on to the branch leading to this leaf provided she has learned the branch as well, for which she has to learn the tree trunk, and so on. Without learning fundamental concepts, it is meaningless trying to learn more specific domains of knowledge. For example, to learn concepts in quantum mechanics, she needs to first learn basic chemistry and physics of matter, basic mathematics including calculus, atomic theory, then classical physics and mechanics, and principles like Pauli’s exclusion and Heisenberg’s uncertainty.

For memorizing facts, three tricks are noteworthy: saying out loud, flashcards (especially for remembering new words), and mnemonics. An example of a mnemonic for memorizing the value of the mathematical constant π : ‘Now I need a drink, alcoholic of course, after the heavy lectures involving quantum mechanics.’ There are a number of such funny and useful mnemonics, which students are encouraged to look up on the internet.

On the Importance of Being Resourceful

To be resourceful, should be the priority of students, for which they need to acquire broad knowledge and real-life experience. A thorough comprehension of lessons taught in the class is necessary, so is learning first-hand practical skills. Of course, students have to buy or rent textbooks and other materials, annotate them and thoroughly study them (see SQ3R method explained below). Students can also take related online courses, the so-called MOOCs (Massive Open Online Courses) to expand their knowledge domain. I also encourage students to download video lectures/tutorials of modern software for thoroughly mastering those. For example, Lynda.com has an extensive collection of software tutorials for Adobe Photoshop, Illustrator, MS Excel, SPSS and so



on. MathTutorDVD is a well-known resource for basic through intermediate mathematics and statistics courses. For science students, a number of popular science resources are available including popular science magazines, podcasts, audiobooks, RSS (Real Simple Syndicate) readers, Google Alerts, virtual museums, blogs, twitter, facebook pages, etc., as recently reviewed in my article in *Science Reporter* [5]. Students are also advised to download/procure relevant TV documentaries/programs from such resources as National Geographic, Discovery, BBC, Doordarshan, etc.

My advice to students will be to associate with, and learn as much as possible from learned peers who know more than them. Some recent pedagogical studies indicate that the best way to learn concepts and retain in long-term memory is through teaching. Students are encouraged to teach what they have learned to their peers.

Cornell Method of Note-Taking

‘Cornell note-taking’ is a well-known method of note-taking in pages with wide margins (*Figure 5*). Jot down as much information as possible during the class quickly, with lucid diagrams. For speed, students can drop vowels, especially the letter ‘e’. For example, *txt* for text, *tkng* for taking, etc. Use as many abbreviations as possible. Notes are to be reviewed immediately after the class, and any major points may be written down in the margin. A concise summary of each page may be written underneath. If you

‘Cornell note-taking’ is a well-known method of note-taking in pages with wide margins.

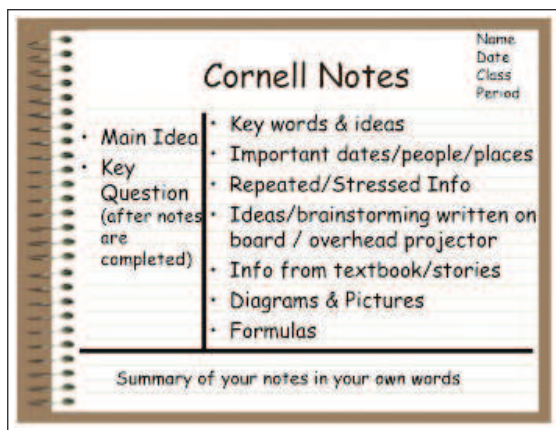


Figure 5. Cornell note-taking method.

Courtesy:<http://www.paulding.k12.ga.us/>

For studying textbooks, one of the best methods is abbreviated as SQ3R: survey, question, read, recall, and revision.

are too tired, you can even voice record the whole class using your portable media player or smartphone using apps like Tape-a-Talk so that you may prepare detailed notes when you feel fresher. I advise students to study in sessions lasting no more than 15 minutes. In between the sessions, students may try to do some fun activities, such as folding a paper airplane and flying it.

Daily and Weekly Review of Lessons

Reviewing is an important technique for memorizing facts and concepts. The human brain stores what has been learned in either short-term or long-term memory formats. The goal of each student should be to make key concepts and facts learned etched into the long-term format. Instead of waiting for the day before an examination to start cramming (and fall for the ‘student syndrome’ – a planning fallacy that most students face) – students may make a habit of reviewing what has been studied on a daily and weekly basis. A number of recent research studies corroborate that memory retention is accelerated in a non-linear fashion by a frequent review of what has been learned (*Figure 6*). For example, if you learn a new word on day 0, for long-term memory retention, you need to typically review the word on day 1, day 3, day 6, day 10, day 15, and so on.

The SQ3R Method

For studying textbooks, one of the best methods is abbreviated as SQ3R: survey, question, read, recall, and revision.

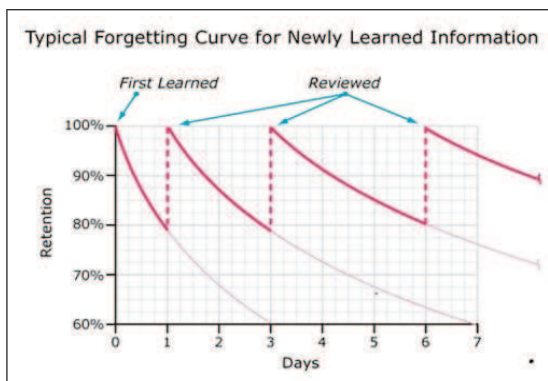


Figure 6. Importance of reviewing in memory retention. Courtesy:www.lifehacker.com

In this method, before studying a book, you are advised to survey it first by skimming through contents, chapter index, illustrations, summary, etc. Select a different book in case the book in question is not what you are looking for. You may also consult teachers for their recommendations. The next step is to write down key questions about the subject that you may have. This prepares you to look for the right information in the book. The third step is to read the textbook carefully, with extensive note-taking in a notebook (see Cornell method). While reading, try to look up the answers for the earlier questions. If answers are not found, read the textbook again. Step 4 is to recall the information from the text, especially responses to the original questions. Try to recall the answers from memory, but if stuck, then you may refer to the book. The final step is to periodically review your notebook for key concepts and facts. You may also attempt teaching these facts and concepts to others, as teaching is an effective way to master a subject.

On Bibliography Management

Over the course of an academic program, students are expected to come up with a bibliography of moderate length. Bibliography becomes more relevant when students start writing term papers, assignments or their final dissertation. Students are expected to make the best use of online literature search tools, especially Google Scholar, Scopus and ISI Web of Science. Over the course of the academic program, students will have a collection of PDF copies of scholarly literature, including articles, monographs, and books. For a thorough management of bibliography, I suggest that students familiarize themselves with the software EndNote®. EndNote enables users to have an organized collection of PDF files. This software also allows the students to format their bibliography and in-text citations in manuscripts automatically¹. Students may also use a local search engine in their laptops that can index full-text of documents for searching through their digital library collection. Two noteworthy local search engines are DocFetcher and Greenstone digital library.

For a thorough management of bibliography, I suggest that students familiarize themselves with the software EndNote®.

¹ An in-depth training of EndNote is available on my website <http://bit.ly/Writing-PPT>.



I strongly advise students to check out my website section that contains curated information with pertinent links on writing and presentations at <http://bit.ly/Writing-PPT>.

On Writing and Presentations

As English is the medium of instruction in most of the universities – a language that is not our mother tongue – having effective communication skills in English is a long-term asset for every student in India. I suggest that students review basic English grammar using textbooks such as *The Only Grammar Book You'll Ever Need: A One-Stop Source for Every Writing Assignment* by Susan Thurman. Students are also encouraged to consult books on English usage, such as *Strunk and White Elements of Style*, *Chicago Manual of Style*, *Penguin Manual of Plain English*, etc. Students can also make use of a plethora of websites for TOEFL preparation, apps for GRE vocabulary preparation with flipping flashcards, and so on, for improving their English communication skills, even if they do not intend to take TOEFL or GRE. They can also make use of Google Chrome/MS Word add-ins such as Grammarly.com for textual correction, usage consistency, plagiarism-detection, and copyediting. For presentations, I urge students to watch interesting presentations at www.ted.com to get an idea on creating impressive presentations. I strongly advise students to check out my website section that contains curated information with pertinent links on writing and presentations at <http://bit.ly/Writing-PPT>.

On Health

Of course, having good health should be the highest priority of any individual. For higher cognitive ability, modern research highlights the importance of nutritious food, exercise, meditation, and sleep. Here is the summary of current scientific consensus for maintaining good health:

For higher cognitive ability, modern research highlights the importance of nutritious food, exercise, meditation, and sleep.

- Consume raw vegetables as much as possible, with moderate amounts of fruits.
- Consume adequate protein content (especially for vegetarians), from sources such as lentils, chickpeas, kidney beans, egg, dairy products, etc.
- Consume carbohydrates with low glycemic index like wholegrain wheat rather than white rice, and consume good fats



(HDLs) in moderate amounts (for example, nuts, mono- or poly-unsaturated vegetable oils and so on). For further information on the high-fat-low-carb diet that I have been advocating, please refer to [3].

- Avoid food containing trans-fats, or artificial sweeteners, as latest research clearly associates consumption of these with various diseases.
- Get 30 minutes of moderate-intensity workouts daily, and include weight-training (resistance-training) twice a week, with at least 3 days of interval. A highly intense, but doable, exercise regime is called ‘the scientific 7-minute exercise’ popularized by *The New York Times*. This is a set of interval workouts that can be done at home without any special equipment. Extensive instruction materials on this are available online, as well as via Android apps. Two inexpensive equipment that supplement home workouts are a stability ball, and a resistance band. A number of clear-to-understand exercises using these tools are available in YouTube. Another excellent whole-body exercise is swimming, and I urge students to learn and practice swimming regularly.
- Students are also encouraged to practice meditation, as a number of studies have revealed an association between meditation and lower stress levels. The method for meditation is indeed quite simple though extensive training is needed to bring perfection. You have to sit in any position comfortable to you (including on a chair), close eyes, and concentrate on breathing – inhalation and exhalation – and if any thoughts come, gently push them away and come back to your breath; just like how the wind pushes fluffy clouds away to make the clear moon reappear in a night sky. If you cannot concentrate on breathing, try counting them. You may use a countdown timer to time your meditation. Another popular variant is called mindful meditation, in which the person becomes super-conscious of the surroundings; for example, voices, smells, things observed, etc. In mindful meditation, a person lives in the present, fleeting, ‘now’, without letting any thoughts about past and future obstruct perception [4].

Another popular variant is called mindful meditation, in which the person becomes super-conscious of the surroundings; for example, voices, smells, things observed.



- Adequate sleep is very essential for ensuring overall cognitive well-being and productivity. While sleeping requirement varies from individual to individual, on average 7 hours of sleep are deemed to be fine. Recent studies have revealed that we sleep in cycles, each of 90 minutes duration. It is preferable to awaken at the end of a cycle rather than in the middle of it, so students can time their bedtime accordingly. Suppose you would like to wake up by 7 AM. Then the perfect time to sleep can be calculated by subtracting in increments of 90 minutes, keeping in view the 5–6 sleep cycles that we minimally need; therefore it is either 10 PM (6 cycles), or 11:30 PM (5 cycles). We usually need 15–20 minutes to fall asleep, which may be factored in. So perfect bedtime for waking up at 7 AM is around 9:45 PM or 11:15 PM. For further information on sleep cycles, please refer to [5].

Pedagogical Suggestions

As with all productivity enhancing methods, the key to success is with the practitioners – the students. All that a faculty can do is to introduce these methods to students, be more cooperative and help them to be consistent with the scheme. For example, provide the students enough time for completing assignments so that they can schedule tasks. Faculties may share the schedule of lectures and other academic activities (for example, an upcoming seminar) with students well ahead of time, so that they may come prepared and contribute in a meaningful manner. Faculties may spend more time in class introducing students to concepts rather than facts, for which a good strategy is inviting the students to come up with exciting questions [6]. They may suggest other useful resources to the students including online references, popular science, video tutorials, print and electronic media, etc. It is a good practice to begin a class by reviewing the key points and concepts that have been covered till then. They may devote a class or two intermittently only for reviewing the covered concepts. Faculties may share electronic versions of textbooks and other key course materials with their students in the beginning of the academic session itself. They may insist that in-text citations and

Faculties may spend more time in class introducing students to concepts rather than facts, for which a good strategy is inviting the students to come up with exciting questions [6].



the bibliography section of written assignments (term papers, write-ups, etc.) and theses be prepared with a bibliography management software for accustoming them to the software and ultimately saving a ton of their time. Faculties guiding research students may schedule a weekly lab meeting with a carefully designed trigger list. My own lab trigger list encompasses the following:

- Lab issues: dysfunctional instruments and alternate arrangements.
- Progress on current papers.
- Upcoming key conferences.
- Grants.
- Status of chemicals with balance sheets.
- Requirements of books.
- Discuss Google alerts on new papers.
- Software licenses; check expiry.
- Herbarium.
- New sequences to GenBank.

Conclusion

Time management and other personal productivity methods expounded in this write-up are essential skills that will greatly enhance the productivity of students. To lead a virtuous life is perhaps equally important, although the definition of ‘virtue’ is highly subjective. One’s philosophy of life is unrelated to one’s religion but has instead to do with answering existential questions such as, ‘What is the meaning of my life?’ Adopting a suitable philosophy of life helps in being more productive and happier (7), and is more desirable than having no philosophy at all. Although I am not a rigorous practitioner, the Hellenistic philosophy of Stoicism is my favorite way of life. Given that teenage and young adults undergo various psychological remolding phases when they tend to become iconoclasts, as illustrated beautifully by J D Salinger in *The Catcher in the Rye*, adopting a philosophy of life early in life is of paramount importance.



Suggested Reading

Address for Correspondence
Felix Bast
Centre for Plant Sciences
Central University of Punjab
Bathinda 151 001, India
Email: felix.bast@gmail.com

- [1] O Burkeman, *The Antidote: Happiness for People Who can't Stand Positive Thinking*, Macmillan, 2013.
- [2] H Ryan, *Obstacle is the Way: The Timeless Art of Turning Trials into Triumph*, Portfolio, 2014.
- [3] F Bast, Low-carb high-fat: A paradigm shift in nutrition, *Science Reporter*, Vol.52, No.3, pp.31–32, 2015.
- [4] E Tolle, *The Power of Now: A Guide to Spiritual Enlightenment*, New World Library, 2004.
- [5] F Bast, Secret of waking-up fresh and having a great day!, *Science Reporter*, Vol.51, No.9, p.11, 2014.
- [6] U Maitra, The importance of asking questions – in different ways!, *Resonance*, Vol.20, No.1, 2015.
- [7] W B Irvine, *A Guide to the Good Life: The Ancient Art of Stoic Joy*, Oxford University Press, 2008.

