

Technical Communication

(I)

仅供教师教学
备课参考



CHAPTER

1

Basics of Technical Communication

OBJECTIVES

You should study the chapter to know

- the importance of technical communication
- how general-purpose communication is different from technical communication
- the objectives and characteristics of technical communication
- the constituents of the communication process
- the different levels of communication
- how communication flows in an organization
- how and why visual aids are used in technical communication

INTRODUCTION

In the academic environment, we encounter various situations involving speech or writing: conversation with friends, professors, or colleagues to achieve various purposes; seminars, group discussions, written tests, and examinations; and laboratory or project report submissions on diverse topics. Likewise, at the workplace, we interact with superiors and subordinates, converse with them face-to-face or over the telephone, and read and write emails, letters, reports, and proposals.

All these activities have a common denominator—*the sharing of information*. For example, when you request your professor to explain a concept you could not understand very well in class, you transmit the information to him/her that you need some clarification. Now, the professor receives this information, understands it, and responds by giving an explanation which clears your doubt. If you are satisfied with this explanation, you thank the professor and the communication comes to an end. If you are still in doubt, you once again request clarification, and the process continues. This process involving the transmission and interchange of ideas, facts, feelings, or courses of action is known as the *process of communication*. We give, get, or share information with others during this process. Whether the communication is oral or written, this process essentially remains the same.

When one becomes a part of any organization, one needs to communicate, and communicate effectively. No organization can survive without communication. All the activities an organization undertakes have communication at their hub. The better our communication skills, the greater are our chances of quick progress. However skilful one may be in other aspects such as work, knowledge, thoughts, and organization, without proper communication, those are of little use. For instance, though you may have an excellent academic record, you may not be successful in an interview if you are not able to express your ideas clearly to those on the other side of the table. It has been observed that

people who are successful in their careers generally have excellent communication skills, which is one of the very reasons for their success. Most of this is technical *communication*, so let us find out more about what role technical communication plays in an organization.

IMPORTANCE OF TECHNICAL COMMUNICATION

Technical communication plays a pivotal role in any set-up, whether it is a business enterprise, an industry as a whole, or an academic institution. All managerial or administrative activities involve communication, be it planning, organizing, recruiting, coordinating, or decision-making. When you write reports, give instructions, or read brochures and manuals, you are involved in the process of communication. Communication serves as an instrument to measure the success or growth of an organization. For example, papers published by R&D organizations bring to light their progress. When the chief executive officer (CEO) of an organization presents his/her company's achievements in a meeting, each of the participants comes to know of these milestones. The higher one's position is, the greater is their need to communicate. A labourer, for example, may not be as involved in formal communication as a top-level executive. The various types of communication not only help an organization to grow, but also enable the communicators to develop the required skills.

However, though most professionals are well aware of the importance of communication, they do not develop their skills to good effect in their sphere of work. The more people participate in the communication process, the better they develop their skills in collecting and organizing information, analysing and evaluating facts, appreciating the difference between facts and inferences, and communicating effectively. To become an effective communicator, one needs to communicate, communicate, and communicate. There is no other way out.

GENERAL AND TECHNICAL COMMUNICATION

Communication is important not only in an organization but also in one's daily life. It is an integral part of daily activity. When an alarm clock goes off, it is communication through sound, urging one to get out of bed. When one feels loyal towards a particular brand of toothpaste, it is possible that the television (TV) commercials for that brand have been successful in communicating the message. Watching news on TV, saying goodbye to one's family, or calling a cab and giving directions are all different types of communication. At the workplace, all activities revolve around oral or written communication. Interacting with one's boss, reading the newspaper at home, or even dreaming in one's sleep are all examples of communication.



Communication in everyday life

TABLE 1.1 Differences between general and technical communication

General communication	Technical communication
<ul style="list-style-type: none"> • Contains a general message • Informal in style and approach. • No set pattern of communication. • Mostly oral. • Not always for a specific audience. • Does not involve the use of technical vocabulary or graphics, etc. 	<ul style="list-style-type: none"> • Contains a technical message • Mostly formal • Follows a set pattern • Both oral and written • Always for a specific audience • Frequently involves jargon, graphics, etc.

Messages that are non-technical or informal in nature are categorized as general-purpose communication, whereas messages pertaining to technical, industrial, or business matters belong to the category of technical or business communication. Table 1.1 shows the differences between the two categories.

OBJECTIVES AND CHARACTERISTICS OF TECHNICAL COMMUNICATION

Technical communication takes place when professionals discuss a topic with a specific purpose with a well-defined audience. Technical communication usually has the following objectives:

- To provide organized information that aids in quick decision-making
- To invite corporate joint ventures
- To disseminate knowledge in oral or written form

Let us take an example of a customer who has bought a washing machine and does not know how to use it. The customer reads the instructions in the user manual and gradually learns to operate the washing machine without any assistance. This is an example of successful technical communication. When you are confused about which camera to buy, the salesperson explains all the technical features of each model to you. If that helps in your buying decision, it is successful technical communication again.

Technical communication has to be correct, accurate, clear, appropriate, and to the point. Correct information is objective information. The language should be clear and easy to understand. If the communication is through a user manual for a phone, remember that people will usually never use it unless they are stuck. And if they are stuck, they will look for instant information to solve their problem. The information must be brief and arranged sequentially so that it is easy for a user to find relevant information. It is also vital that the technical information provided in the manual be accurate.

PROCESS OF COMMUNICATION

Communication can be defined as the exchange of information, ideas, and knowledge between a sender and a receiver through an accepted code of symbols.

For sharing information, two parties are required—the sender and the receiver—without whom communication, which is an interactive process, cannot take place. At any given time, one is active and the other is passive. However, this is not sufficient; there should also be cooperation and understanding between them. Through what they have to communicate, the sender and receiver mutually influence each other. They should have a mutually accepted code of signals making up a common language. So,

Unit One: Drafting Emails for Work



Useful Tips to Prepare Memos

1. Use the standard format or the one prescribed by the organization.
2. Include all the necessary segments.
3. State clearly the context and purpose in the opening segment.
4. Keep in mind your relationship with the recipient to choose the degree of formality.
5. Maintain a positive tone.
6. State in the closing segment what action is expected from the recipient.
7. Use features like highlighting, bold face, etc. to draw attention.
8. Keep the memo short.

Some bosses—those who believe in the importance of upholding status distinctions—want memos to sound formal and distant in a way that is appropriate while communicating to a superior. Others—those who have an open and participative approach to managing—would prefer the use of first person, contractions, and even sentence fragments to create an informal and conversational style. While writing a memo, therefore, one may choose the style that suits the organizational culture, but keep in mind that a friendly tone and courtesy are always required to suggest an association with the reader.

Generally, the tone is kept neutral or positive, but one may occasionally have to issue complaints or reprimands in memo form. Use caution in negative situations, and be aware of the effect of the correspondence. If the communication is spiteful, blunt, or too coldly formal, it might annoy the recipient. Flowery language, excessively technical jargon, or complicated syntax will make one sound pompous. Therefore, one should aim to sound cordial, straightforward, and lucid. Develop a relaxed and conversational style without being too chatty. Projecting an image of consideration creates a greater chance of being viewed as knowledgeable and competent in carrying out the professional responsibilities.

Ensure that a memo is as short and to-the-point as possible. Whether the news is good, bad, or neutral, address the issue in the opening segment. If the memo is lengthy, provide an indication of its organization in the opening segment. Exhibits 15.23 and 15.24 illustrate a memo. The CD contains more samples.

EMAILS

The phenomenally rapid growth of the Internet and its widespread use in business has changed the way in which organizations communicate. All organizations have Internet access, and most individuals have a personal email address. Many companies are promoting the use of email for most—if not all—in-house correspondence, and a great deal of communication with outside organizations also relies on email.

Email stands for electronic mail. These are digital messages that can be sent through an Internet connection. Email offers some tremendous advantages. It is fast—a message can be sent to as many people as necessary instantaneously. It is inexpensive, as it saves paper and is promoted in most organizations as a green initiative. It is convenient and saves time. When dealing with external agencies, especially important clients, it is the most unobtrusive mode of communication, as the recipients can read it at their own leisure and pace, and respond after due reflection.

EXHIBIT 15.23 Sample memo 1

Elite Cycles Limited
Jaipur
Interoffice Memorandum

Date: 10 May 2014

To: Production Manager
From: Personnel Manager
Subject: CHANGE IN WORKING HOURS

Please refer to your memo pd/21 dated 6 May 2014 requesting for a change in working hours of your division because of the extremely hot weather conditions.

As desired by you, the Vice President, Personnel, has agreed to change the working hours. The new timings will be 7 a.m. to 1 p.m. (Monday through Saturday) with effect from 17th May 2014 to 16th July 2014. Kindly inform all the employees working under you.

K. S. Shah
K.S. Shah

Amber Towers, A. C. Road, Jaipur - 302001
Phone 0141- 5112413

When email technology was introduced, it brought in a completely different world in terms of writing. For one thing, it was very informal, as personal emails did not require strict attention to grammatical rules. Page design did not exist. People have adopted the informality of email that had become a standard feature of the genre. However, as emails gradually replaced office letters and memos of all kinds, a certain amount of formality has been introduced. Governments and ministries now use emails for their official communication.

Email also has its own vocabulary of acronyms. Some of the most common ones are listed in this chapter. Email combines most of the best—and a few of the worst—characteristics of the more well known methods of communicating, including postal mail, telephone, and fax.

EXHIBIT 15.24 Sample memo 2**National Institute of Technology**

Worli, Mumbai

Interoffice Memorandum

Date: 25 August 2014

To : Dean, Educational Hardware Division

From: Manager, Reprography Unit

Subject: PURCHASE OF THREE PHOTOCOPIERS

With the addition of four new departments and consequent increase in the number of both faculty and students, the volume of work in the reprography unit has considerably gone up.

The two CopyFast photocopiers that we have at present are no longer adequate to meet the demands. These machines were bought seven years ago and have become obsolete. Moreover, they break down frequently and need major repairs. This year alone we have spent Rs 25000/- to keep them in working condition.

Our estimate shows that we now require at least three more photocopiers to cope with the increasing demand. We have also studied the features and the cost of various brands of photocopiers currently available in the market.

We recommend the purchase of three ImageX5 photocopiers from Singhania Imaging Ltd., Mumbai. The price list is enclosed.

I request your approval for the purchase of these three photocopiers.



Sait Ali

You can do several things with email that are difficult or impossible with any other form of communication. While email is an efficient way to communicate, it is also subject to limitations. In particular, we must realize when email is appropriate and when it is not. For example, when writing about emotionally charged subjects (or when the person we are writing to may become angry, defensive, or otherwise upset about a subject, or when we are angry), a face-to-face conversation is generally more appropriate than email. Similarly, discussing confidential matters or very complex issues is often better done in other ways than through email.

Advantages and Limitations

Advantages

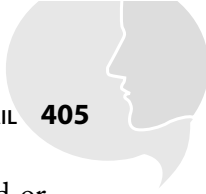
- It is possible to communicate quickly with anyone through the Internet. Email usually reaches its destination in a span of minutes or seconds.
- It is easy to send messages to more than one recipient simultaneously by just typing in several email addresses. It also allows one to maintain mailing lists on the computer, which allows quick distribution to many people. It results in avoiding repetition or reproduction of text.
- Email can be used to access vast pools of information stored on the Internet.
- Thousands of email messages can be saved and stored, and one can search message files electronically.
- All or part of an email can be pasted into other computer documents.
- Some email services allow access to a printer-friendly version of email messages.
- Most email systems have a reply button that enables one to include all or part of the original message when replying. This feature speeds up replying to messages, as people spend a lot of time establishing a context for their reply in a phone call or a letter.
- Drawings, sounds, video clips, and other computer files can be attached to an email.
- Letters, notes, files, data, or reports can all be sent using emails.
- One need not worry about interrupting someone when sending an email. The email is sent and delivered by a computer system communicating with the Internet. Although it is put into someone's mailbox, the recipient is not interrupted by the arrival of email.
- The received emails can be dealt with at a convenient time in leisure. Also, it does not have to be written or sent only at a time when the recipient will be available. This is known as asynchronous communication.
- Emails are not anonymous—each message carries the return address of the sender—but it is possible to write to anyone with an email address. All the messages appear the same to the person who gets the email. The messages are generally judged on the basis of their content, not their source.
- As in the case of postal mail, emails can be marked with high, medium, or low priority. The email can also be marked for receiver's action.
- The cost of sending an email is independent of the distance, and in many cases, the cost does not even depend on the size of the message. Most Internet access charges are based on the number of hours one uses the Internet per month, or a flat monthly fee.

'What a wonderful thing is mail, capable of conveying across continents a warm human hand-clasp.'

—Author Unknown

Limitations

- Email is editable. Email communication is subject to security issues. It is therefore insecure.



- Email is anonymous. The identity of a message's author can be completely masked or lost in just two generations of the message. It might be impossible to be certain as to where an email originated. Without an identifiable source, any claim based on it cannot be validated.
- Email cannot be retracted. Once the 'Send' button is pressed, there is no bringing it back.
- Email is not necessarily private. Since messages are passed from one system to another, and sometimes through several systems or networks, there are many opportunities for someone to intercept or read email. Many types of computer systems have built-in protections to stop users from reading others' email, but it is still possible for a system administrator to read the email on a system or for someone to bypass the security of a computer system.
- Some email systems can send or receive text files only. Although we can send and receive images, programs, files produced by word processing programs, or multimedia messages, some recipients may not be able to properly view the message.
- It is possible to forge email. This is not common, but it is possible to forge the address of the sender. We may want to take steps to confirm the source of some emails that we receive.
- We can receive too much or unwanted email, just like other types of junk mail. Junk email is called spam. One may have to take active steps to delete the junk mail received and try to stop it from being sent in the first place.
- We may not know about the person with whom we are communicating. The communication is often all in text and it is possible for us to get an incorrect impression of the person sending us email. Also, some people misrepresent themselves. One must be aware of phishing, which can be used for identity threat. Phishing is the process of attempting to access sensitive information such as usernames and credit card details by pretending to be trustworthy entity.

Style, Structure, and Content

Email messages are equivalent to brief informal memos used to communicate information or ask questions. Email messages must be kept *brief*; ideally, under 200 words. In some circumstances, such as writing an email report, longer messages will be required. However, in most cases, short messages are likely to get the point across more clearly and are also more likely to get answered. Few people are interested in reading messages much longer than what fits on their computer screens. In fact, some people do not read lengthy messages or stop reading after the first few hundred words.

Also exercise caution in terms of the tone used. For example, a message from a junior employee that addresses the president of a major company using an informal tone in an email note to a colleague would be inappropriate. In other words, the audience and purpose when writing email should be considered as carefully as when writing formal letters.

Also, just because the medium is electronic, do not assume the messages being sent are short-lived. Many people archive their email and system administrators can retrieve long-deleted messages. An ill-conceived email may still be available in the archives or deleted mail.

Poor spelling and grammar in email messages could lead some readers to question the writer's competence. Although problems with spelling and grammar are generally ignored in forums such as the various *Internet Newsgroups* (indeed, commenting on these sort of issues is generally considered bad Internet manners), they are generally frowned upon in schools and

industry. Sending an email memo filled with spelling errors to an instructor, client, or supervisor is ill-advised. Always take the time to consider the effect that the tone, style, grammar, and spelling of a mail may have on the recipient.

As far as the structure of email is concerned, there are three parts: header, message, signature. The header identifies the sender, receiver, people who receive a copy of the mail, the date on which the mail is sent, and the subject. The message includes the content and the signature block contains the name of the sender. The senders can also add their address and phone numbers to the signature block.

Emoticons and acronyms

Emoticons, or *emotional icons*, are used to compensate for the inability to convey voice inflections, facial expressions, and bodily gestures in written communication. Some emoticons are better known as *smileys*, as they are faces showing different expressions. As they are read from a monitor screen, emails tend to be a cold and emotionless medium. It is also very easy to offend people without even knowing that we have. Sarcasm, even meant in good heart, is usually misinterpreted. That is why emoticons were developed. They allow you to make it clear when what you are saying is not meant to be taken seriously. Those with a dry sense of humour, for example, can use ;-) which is a wink and a grin.

Some commonly used emoticons and email acronyms are listed in Table 15.10. While there are no standard definitions for the following emoticons, we have supplied their most usual meanings. Refer to the CD for common email jargon.











TABLE 15.10 Common emoticons and acronyms

Emotion	Expression	Emotion	Expression
:) or :-)	Expresses happiness, sarcasm, or joke	:Q or :-Q	Expresses confusion
:(or :-(Expresses unhappiness	:@ or :-@ or	Expresses shock or screaming
:] or :-] or :D or :-D	Expresses jovial happiness	😓 :-s	Worried
:[or :-[Expresses despondent unhappiness	😂 :))	Laughing
:! or :-!	Expresses indifference	😴 I-)	Sleep
:/ or :\ or :-/ or :-\	Indicates undecided, confused, or skeptical	😷 :-&	Sick
:S or :-S	Expresses incoherence or loss of words	😡 X-(Angry
🤐 [-(Not talking	💀 8-X	Skull
😴 (:	Tired	👽 =:)	Alien 1
🤔 :-?	Thinking	👽 >-)	Alien 2
👏 =D>	Applause	😠 :-L	Frustrated

(Contd)

TABLE 15.10 (Contd)

Emotion	Expression	Emotion	Expression
 %%-	Good luck	 <:)	Cowboy
 **==	Flag	 [-o<	Praying
 ~o)	Coffee	 :>-	Peace
 *-:)	Idea	 O:)	Angel
Acronyms	Expansion	Acronyms	Expansion
ASAP	as soon as possible	AAMOF	as a matter of fact
BBFN	bye bye for now	BFN	bye for now
BTW	by the way	BYKT	but you knew that
CMIIW	correct me if I'm wrong	EOL	end of lecture
FAQ	frequently asked question(s)	FITB	fill in the blank
FWIW	for what it's worth	FYI	for your information
HTH	hope this helps	IAC	in any case
IAE	in any event	IMCO	in my considered opinion
IMHO	in my humble opinion	IMNSHO	in my not so humble opinion
IMO	in my opinion	IOW	in other words
LOL	lots of luck or laughing out loud	MGB	may God bless
MHOTY	my hat's off to you	NRN	no reply necessary
OIC	oh, I see	OTOH	on the other hand
ROF	rolling on the floor	ROFL	rolling on the floor laughing
RSN	real soon now	SITD	still in the dark
TC	take care	TIA	thanks in advance
TIC	tongue in cheek	TTYL	talk to you later
TYVM	thank you very much	WYSIWYG	what you see is what you get
<G>	Grinning	<J>	Joking
<L>	Laughing	<S>	Smiling
<Y>	Yawning		

Email Etiquette

There are many etiquette guides and many different etiquette rules. Some rules will differ according to the nature of the business and the corporate culture. Here, we list what we consider as the 24 most important email etiquette rules that apply to nearly all formal communication situations.

Answer swiftly

People send an email because they wish to receive a quick response. If they did not want a quick response, they would send a letter or a fax. Therefore, each email should be replied to within at least 24 hours, and preferably within the same working day. If the email is complicated, just reply saying that the email has been received and that you will get back to them. This will put the reader's mind at rest and usually they will then be very patient.

Do not overuse reply all

Use Reply All only if you really need your message to be seen by each person who received the original message.

Use templates for frequently used responses

If you often tend to receive the same queries, such as directions to your office or how to subscribe to your newsletter, save your replies as response templates and paste these into your message when you need them. You can save your templates in a Word document, or use pre-formatted emails. Even better is a tool such as *ReplyMate* for Outlook (allows you to use 10 templates for free).

Use proper structure and layout

Since reading from a screen is more difficult than reading from paper, the structure and layout are very important for email messages. Use short paragraphs and blank lines between each paragraph. When making points, number them or mark each point as separate to keep the overview.

Identify yourself and the topic

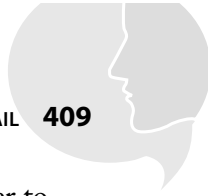
Where possible, identify yourself on the From: line using your full name rather than just email address. For example, use 'Amit Kumar Saxena' aks@vu.edu.in rather than just aks@vu.edu.in. Recipients are more likely to respond if they can easily identify the sender. In addition, knowing whom a message is from helps the recipient put the message in context.

At the end of the message, include an alternative way to be contacted (i.e. phone number, FAX, postal address) along with the name. This information can be provided in a signature field that can be turned off for more personal emails. Providing contact information is especially important when asking for an answer that is likely to be quite complex. Often, less time is required to explain something complex over the phone or in person than to type out the message.

The information in the subject line should be meaningful to the recipient as well as the sender. For instance, when sending an email to a company requesting information about a product, it is better to mention the actual name of the product, e.g., 'Product A information', than to just say 'Product information' or the company's name in the subject.

Answer all questions, and pre-empt further questions

An email reply must answer all questions, and pre-empt further questions. If all the questions in the original email are not answered, it will likely bring further emails regarding the unanswered questions, which will not only waste the time of the sender and the recipient but also cause considerable frustration. Moreover, if one is able to pre-empt relevant questions, the reader will be grateful and impressed with the sender's efficiency and thoughtfulness. Imagine for instance that an off campus student sends you (assume that you are a professor of Electronics



Engineering) an email asking some doubts on a lesson. Instead of just explaining the answer to the student's problem, if you mention some other sources that he/she can refer to for further understanding, the student will definitely appreciate this extra information.

Be concise and to the point

Do not make an email longer than it needs to be. Remember that reading an email is harder than reading printed communications and a long email can be very discouraging to read.

Use proper spelling, grammar, and punctuation

As in all forms of written communication, this is not only important—because improper spelling, grammar, and punctuation give a bad impression of the individual or the company—but also essential for conveying the message properly. For example, using *u*, *r*, and *ur* for *you*, *are*, and *your* respectively is inappropriate for formal messages. Mails with no full stops or commas are difficult to read and can sometimes even change the meaning of the text. If your program has a spell checking option, why not use it?

Do not write in CAPITALS

IF YOU WRITE IN CAPITALS IT SEEMS AS IF YOU ARE SHOUTING. This can be highly annoying and might trigger an unwanted response in the form of a flame mail. Therefore, try not to send any email text in capitals.

Avoid long sentences

Try to keep the sentences to a maximum of 15–20 words. Email is meant to be a quick medium and requires a kind of writing different from letters.

Use active instead of passive voice

Try to use the active voice of a verb wherever possible. For instance, 'We will process your order today' sounds better than 'Your order will be processed today'. The first sounds more personal, whereas the latter, especially when used frequently, sounds unnecessarily formal.

Keep your language gender-neutral

It is important to be gender-sensitive. Avoid using discriminatory language such as: 'The user should add a signature by configuring his email program'. Apart from using he/she, you can also use the neutral gender: 'The user should add a signature by configuring the email program'.

Maintain coherence

When replying to an email, include the original mail in the reply, Click 'Reply', instead of 'New Mail'. Some people opine that the previous message must be removed since this has already been sent and is therefore unnecessary. However, if a person receives several emails, it is difficult to remember each individual email. This means that a 'threadless email' will not provide enough information and the recipient may have to spend a frustratingly long time to find out the context of the email in order to deal with it. Leaving the thread might take a fraction longer in download time, but it will save the recipient much more time and frustration in looking for the related emails in their inbox.

Do not overuse the high priority option

We all know the story of the boy who cried wolf. Overuse of the high-priority option will make it lose its function when really needed. Moreover, even if a message has high priority, it will come across as slightly aggressive if it is flagged as 'high priority'.

Do not attach unnecessary files

Large attachments can annoy readers and even bring down their email system. Wherever possible, try to compress attachments and only send attachments when they are productive. Moreover, one should have a good virus scanner in place to prevent the readers from receiving documents containing viruses.

Re-read the email before you send it

A lot of people do not bother to re-read an email before they send it out, as can be seen from the many spelling and grammatical mistakes contained in emails. Besides, reading the email from the recipients' perspective will help frame a more effective message and avoid misunderstandings and inappropriate comments.

Take care with abbreviations and emoticons

In business emails, try not to use abbreviations such as BTW and LOL. The recipient might not be aware of the meanings of the abbreviations, and in business emails these are generally not appropriate. The same goes for emoticons. It is advisable to avoid using any entities that the recipient might not be familiar with.

Be careful with formatting

Remember that when an email is formatted, the sender might not be able to view the formatting, or might see fonts that are different from the ones intended. When using colours, use a colour that is easy to read on the background. One also needs to be aware of the fact that there are some accessibility norms that do not allow the use of certain colours, keeping in mind colour-blind people.

Take care with rich text and HTML messages

When sending an email in rich text or HTML format, be aware that the sender might be able to receive only plain text emails. If this is the case, the recipient will receive the message as a .txt attachment. Most email clients, however, including Microsoft Outlook, are able to receive HTML and rich text messages.

Do not use email to discuss confidential matters

Sending an email is like sending a postcard. Do not send confidential information by email. Moreover, never make any vilifying or discriminating comments in formal emails, even if they are meant to be jokes.

Avoid using URGENT and IMPORTANT

Even more so than the high-priority option, try to avoid the use of words such as 'Urgent' and 'Important' in an email or subject line. Use this only if it is a really, really urgent or important message.



Use the Bcc: field or do a mail merge

When sending an email, some people place all the email addresses in the To: field. There are two drawbacks to this practice: (1) the recipient knows that the same message has been sent to a large number of recipients, and (2) someone else's email address is being publicized without their permission. One way to get round this is to place all addresses in the Bcc: field. However, if the To: field appears blank, it might look like spamming to all the recipients. Instead, the list containing the email addresses of all recipients could be included in the To: field, or even better, with Microsoft Outlook and Word, it is possible to mail merge and create one message for each recipient. A mail merge also allows the use of fields in the message so that each recipient can be addressed personally. For more information on how to do a Word mail merge, consult the Help feature in MS Outlook.

Using the cc field

Try not to use the Cc field unless the recipient in the Cc field knows why they are receiving a copy of the message. This will depend on the situation. Only the recipients in the To field are supposed to act on the message. The Cc field is used to keep others informed about the project, e.g. the manager or a co-worker.

The Bcc is used when a copy of the mail is to be sent to other recipients without the knowledge of the main recipient. For example, it is used in official correspondence such as appraisals being done by first-level managers. The first-level manager provides some feedback to his/her subordinate over email, but includes the second-level manager in Bcc, just for his/her information. The subordinate doesn't get to see that the email is also copied to the second-level manager. This is mostly used for providing sensitive feedback that is supposed to be private.

'I consider it a good rule for letter-writing to leave unmentioned what the recipient already knows, and instead tell him something new.'
—Sigmund Freud

Do not reply to spam

Replying to spam or unsubscribing confirms that the email address is 'live'. Confirming this will only generate even more spam. Therefore, just hit the delete button or use email software to remove spam automatically.

Effectiveness and Security

Email is, of course, a form of written communication, but it is different from traditional written communication. Email is not bound by the physical limitations of a page of paper, it can be transmitted and received very quickly, and a single message can be sent to a group of thousands



Some Tips for Email Effectiveness

1. Write a meaningful subject line.
2. Keep the message focussed and readable.
3. Use attachments sparingly.
4. Identify yourself clearly.
5. Be kind. Do not flame.
6. Proofread.
7. Do not assume privacy.
8. Distinguish between formal and informal situations.
9. Respond promptly.
10. Show respect and restraint.

TABLE 15.11 Characteristics of memos, letters, and email

Characteristic	Letters	Memos	Email
Structure	Contains several elements starting from heading to distribution list	Contains lesser elements than letters and does not include salutation and complimentary close	Contains most of the elements which a letter has but addresses are the email addresses or email ids
Layout	Elements are arranged in any of the layouts discussed earlier in the chapter	Heading elements are aligned with left margin vertically	Given in prescribed format by the email service providers
Purpose	To persuade and to share information	To share information, to direct to recommend, or to congratulate	To convey short routine messages quickly
Audience	Generally low-tech and lay readers, such as vendors and clients	Generally high-tech or low-tech, mostly business colleagues	Generally multiple readers with various levels of knowledge; could include instructors, company supervisors, and subordinates as well as family and friends
Degree of formality	More formal than memos because of external destination	Generally informal because of internal circulation	Degree of formality is less than both in memos and in letters and follows a conversational style
Short forms, abbreviations,	To be avoided	To be avoided unless very common among the employees	To be judiciously used
Circulation	External	Internal	Both internal and external

of people as easily as it can be sent to one or two people. Since email is written communication and it is not done on paper, we have to do what we can to make it easy to read and comprehend. Because messages are sent electronically, it is possible to get a response in a matter of minutes or seconds. When we are communicating, trading comments separated by only a few seconds, email is similar to spoken communication. It tends to get informal and personal, and that is probably just the way we want to be during quick exchanges with another person. On the other hand, when we are communicating using email, we cannot display our facial expressions or gestures or express intonation the same way we would when speaking.

There is no substitute for a well-thought-out and well-expressed message. There is also no excuse for mis-spellings or grammatical errors in professional or business communications. To make an email most effective, it has to be written clearly, take into account the fact that people will likely be reading the message on a computer screen, and take full advantage of the medium itself.

However, one must be aware of the ease with which email messages can be sent to unintended readers and of the possibility that old email messages will come back to haunt the sender. The following guidelines are worth following:

- Ensure that personal messages are sent to the correct individual and not to a mailing list. Many email users have been embarrassed by accidentally sending personal or confidential

messages to an entire mailing list or organization. Before sending an email, one of the last things that should be done is check that it is being sent to the intended recipient(s).

- Do not send confidential or personal material via email unless it is encrypted because most email systems are insecure. We suggest that any email message sent should be treated as a public document simply because email servers typically maintain copies of email and many people archive the email they receive. An email message sent several years ago could turn up when least expected.



Although you may be familiar with sending and receiving email messages, the CD provides some sample email messages.

Now that we are aware of the three forms of written communication, namely letters, memos, and emails, Table 15.11 concludes the chapter with a comparison of the various characteristics of these very important forms of communication.

SUMMARY

Writing letters, memos, and emails is an integral part of all academic and work environments and cannot be avoided. To create and maintain a cordial relationship with people one has to deal with, one should develop the art of writing. While good command over language is a must, one must also know the structure of the various forms of written communication. Effective writing possesses the seven Cs of writing, that is, it should be clear, concise, correct, courteous, conversational, convincing, and complete. As a rule, any letter must be responded to at the earliest.

The purpose of writing a letter is to sustain a relationship or build a new one. Business letters are of different types, such as credit and collection, enquiry, order placement, complaint and adjustment, instruction letters, and persuasive letters. The principles of business writing will also enable one to write impressive job applications and résumés. More common today is the online submission of a résumé, accompanied with a covering email. Besides these types, there are official and personal letters.

Memos are a very common medium of communication within an organization. The purpose is to

inform, persuade, or reprimand. They are classified as documentary, congratulatory, and disciplinary. Most organizations have their own prescribed format for memos; however, the standard format can be followed otherwise. Memos use a more informal language than business letters.

Emails have come to be used widely throughout the world today. It is one of the most convenient ways to contact people in any part of the world for business or personal purposes. Communication through emails has its advantages and disadvantages. Emails also have their own set of vocabulary, jargon, and etiquette. It is prudent to be aware of the email etiquette. Learning how to use emails effectively will definitely go a long way in helping one to develop good communication skills. It is also worthwhile knowing the security issues involved, so that we are able to make the best use of this wonderful mode of communication.

A good idea of these three major forms of written communication will help us to use the most effective mode in any given situation, and help us achieve our goals effectively and efficiently.

EXERCISES

1 Answer briefly the following questions :

- How are letters, memos, and emails different from each other? Do they also have any similarity? Explain.
- Emails are very fast means of communication, but have some drawbacks. Discuss.
- Discuss the important points to be considered while drafting a cover letter to accompany a résumé.

- (d) Discuss email etiquette.
- (e) You have submitted a proposal to University Grants Commission (UGC) on 'Enhancing education in rural area through technology'. Write a letter urging action. Invent the necessary details.
2. Recall or refer to the principles of writing business letters discussed in this chapter and point out the weakness in the following sentences taken from business letters. Then rewrite them so as to make them effective.
- (a) I beg to inform you that owing to the nationwide shortage of packing material we are not in a position to comply with your request.
- (b) We do not find any reason why you are asking for the replacement of computers, which you have mentioned in your letter reached you in damaged condition.
- (c) As instructed, we will bill you for this amount. We are sending the goods today by Green Grass Couriers.
- (d) Your misunderstanding of our June 7 letter caused you to make this mistake.
- (e) Even though you were late in paying the bill, we did not disallow the discount.
- (f) In replying to your esteemed favour of the 5th, I submit under separate cover the report requested by you.
- (g) This is to strongly protest the inappropriate behaviour of your sales manager when I requested her to kindly permit me to meet you because I wanted to tell you about the external agencies which are creating some problems.
- (h) With reference to your request for the supply of 10 Kg of wheat flour to be used on the auspicious occasion of your house warming ceremony, we are sorry to say that we may not be able to make any commitment at the present moment of time.
- (i) You should be aware of the fact that there is no better dealer for Greeting Cards than us not only in this whole city but also in the other 3 metropolis.
- (j) Though I have carefully gone through the report prepared and submitted by you to us in your letter of 15th June, I regret to say that owing to the reason that I am extremely busy, I am not in a position to take any action for the proper implementation of recommendations offered by you with great consideration.
- (k) I hereby acknowledge the receipt of your letter and beg to tell you that as per the rules, it is not required to submit your request for loan to the branch manager.
3. Rewrite these opening sentences of claim and adjustment letters:
- (a) We are sorry that we cannot accept the return of the TV that you bought on August 5.
- (b) You are certainly being unfair to us when you insinuate that we tried to put something over on you when you bought a defective lamp.
- (c) We cannot understand how your records could have been broken as you claim in your letter of March 10.
- (d) We are surprised to learn that you are already having trouble with your Cine movie projector.
- (e) In answer to your letter expressing dissatisfaction with your dictating machine, I wish to state that we stand behind anything we sell.
4. Revise these statements granting or refusing adjustments:
- (a) Although we are not at fault, we are willing to accept return of the lampshade.
- (b) It is simply impossible for us to grant your request. Everyone gets the same fair treatment at Gordon's.
- (c) Since the delay in delivery was not our fault, we cannot accept the responsibility for your loss.
- (d) We shall be willing to exchange the machine in order to retain you as a valued customer.
- (e) We will make this concession to you, even though it is much more than should be expected under the circumstances.
5. Revise these sales letter beginnings to give them more reader appeal. You may use the method of gaining attention in the opening sentence.
- (a) We are conducting an intensive sales campaign to get the public to know about the Book Club.
- (b) November 5 was a night of darkness for millions of people in the East. There was a power failure that lasted for several hours.
- (c) Can't you remember the fun you had at Lake Joy last summer?
- (d) The quality of the paper you use will affect your reader's reaction to your message.



- (e) We believe that the Current Review is a winner.
6. Change these negative introductions to make them affirmative:
 - (a) You don't want to waste your money when you buy tyres.
 - (b) Srickem was developed to prevent your plastic floor tiles from buckling and curling. You will never have to worry about unsightly playroom floors again.
 - (c) Don't you remember last December 26? Were you prepared to cope with the record snowfall? Were you not huffing and puffing with your snow shovel while your neighbours guided their snow blowers along their walks?
7. Revise these sentences to eliminate dangling phrases:
 - (a) Before rejecting these designs, we suggest that you compare them with other plans.
 - (b) Relying on his ability to react quickly in emergencies, the car picked up speed.
 - (c) Already filled with students, the visitors could find no place in the auditorium.
 - (d) Referring to your letter of March 13, your complaint was ill-advised.
 - (e) Having sent the incorrect invoices to you, we assure you that we will adjust it at once.
8. Rewrite these sentences to eliminate all double negatives:
 - (a) Didn't you hear nothing from the personnel manager about your promotions.
 - (b) The problems had arisen so unexpectedly that scarcely nobody in the office knew what to do.
 - (c) Plan your vacation trip now. Don't plan to go nowhere this summer.
 - (d) That cannot be done no longer by any member of the tax department.
9. Assuming that you have the requisite credentials, draft Job Application Letters in response to the following advertisements:
 - (a) Wanted a Plant Manager (Operations) at our new factory in Gaziabad, UP Engineering Graduates with minimum 5 years experience in manufactur-ing industries as Plant Managers can apply. Salary is negotiable. Apply with particulars to Box 650, The Hindu, Chennai-600004 latest by 30th July.
 - (b) If you are a recent post-graduate in science and interested in research, apply for the post of Junior Research Associate in our R&D

Division. You should hold a post-graduate degree in mathe-matics, physics, chemistry, or biology. If selected you will be given a Research Assistantship of Rs 8000/- p.m. and you will have the opportunity to work in excellent laboratories. Apply within 15 days to Manager Research, R&D Division, Wipro Industrues, Bangalore-560 012.

- (c) Safe Insurance Company seeks personable, college-trained person to manage office of five employees. People skills and good communication ability a must. Knowledge of office procedures and Word processing essential. Send application within 10 days to Human Resource Office, P.O. Box 719, Kanpur.
- (d) Healthy Foods Ltd, a fast-growing manufacturer in the food-processing industry, has openings in its training program. Only highly motivated, dynamic, and result-oriented people with excellent communication skills need apply. Opportunities for advancement to management positions based on performance. Applicants must demonstrate a professional image and possess skills in working with people. Computer literacy required. Apply to Personnel Manager, P.O. Box 520, Bangalore.
10. Answer as directed.
 - (a) As the Manager of Sangam Hotel, New Delhi, write a claim letter to the General Manager of Bharat Potteries, Aligarh Road, Bhavanipur, telling him that most of the contents of the china-ware which you had ordered from their firm have reached you in a damaged condition. Demand replacement or suitable compensation. Invent necessary details.
 - (b) As the Purchase Manager of Satyam Computers, 9 Naidu Road, Hyderabad-500007, you had ordered two dozen Personal Computers from Hindustan Computers Limited (HCL), 140 M.G. Road, Bangalore-500001. When the consign-ment arrived, you found some of the pieces in the damaged condition.
 - (i) Write a *complaint letter* to the Sales Manager of the company asking for repair, replacement, or compensation.
 - (ii) As the Sales Manager of HCL, draft a *suitable reply*.

Use full block format in both the letters.

- (c) As the Purchase Officer of a Company, write a complaint letter to Uniflex Ltd, New Delhi, pointing out the damage which was discovered after checking the consignment containing Compact Discs sent to you by the supplier. Invent the necessary details.
- (d) Playing the role of Senior Sales Manager, Apex Ltd, draft a suitable reply to this claim letter. Use full block letter format for the letters.
- (e) Ajay purchased a VCR on August 13 from Smiley's TV Town, Mumbai. The VCR came with a 'ninety-day warranty against all defects' and a guarantee for 'in-home free repairs and labor'. On October 30, the VCR showed a horizontal line across the screen when she replayed tapes. Ajay called the store manager, Vikas Mallik, and explained the problem. Mallik said the horizontal lines were caused by a dirty head and told Ajay to bring the VCR in for cleaning. He also told Ajay that he would be charged for this service since dirty VCR heads were basic wear and, therefore, not covered by the warranty. Ajay was angered by this response from the store manager and decided to write a letter of complaint. Based on the information provided, write Ajay's letter of complaint.
- (f) As the Sales Director of Fitness Plus Centre, Bangalore, draft a sales letter to Business Professionals selling them on your 3 Wellness Packages: 1. The 3-day Fitness Weekend 2. The 7-day Total Fitness Program 3. The Individualized Corporate Well-being Program.
- (g) Assume that you are the Marketing Manager for a professional hockey team. At present, you are concerned about season-ticket sales for the coming season. They are well below sales for previous years and hence you plan to do something about it. Draft a sales letter to those 500 people who have bought season ticket last year but did not this year.
- (h) Realizing the need of packing services in Faridabad, Elite Professional Packers have recently started their services in the city. You, as the publicity manager of this company have the onus of promoting this service. Draft a sales letter to be sent to the prospective users.

11. Draft a memo as directed in each of the following:

- (a) Various universities in India offer their academic programmes through distance learning mode of education. A large number of junior officers of a company have sought permission to improve their educational qualifications through these programmes. As the Manager of Personnel Department of this company write a memo to be sent to all Junior Officers spelling out (a) the company's policy in this regard and (b) the deadline for submitting their applications. You can also assure them that a decision would soon be taken and communicated to the applicants.
- (b) Workwell Industries Limited has observed that a sizeable number of employees take leave on certain occasions such as mega music event, test cricket matches, and international film festivals. You as the Vice President, Personnel, feel that this hampers the smooth functioning of the industry and tells upon the efficiency of the organization. Appealing to the Divisional Heads of your organization to take suitable action to prevent such mass absenteeism, draft a memo and mark a copy of the same to your Managing Director.
- (c) The General Manager of Comfort Home Appliances Ltd, Kolkata, is worried about the wastage of stationery in almost all sections of the company. Draft a memo to be signed by him and sent to all Sectional Heads, asking them to identify the reasons behind such wastage and also advise the employees under their control to restrain from such wastage.
- (d) Elite Industries Ltd, Gurgaon, has decided to replace the furniture in its Marketing and Human Resource Development Divisions. As the Office Manager, write a memo to the Purchase Officer to identify the items of furniture to be replaced, identify the supplier, and submit a memo containing all the related details for administrative approval. Mark a copy of this memo to the Finance Manager.
- (e) The Clean Food Products Ltd, Kanpur has decided to provide Internet surfing facilities to all its employees. As the Managing Director of this company, draft a memo to be circulated among all the Divisional Heads containing the following details:



- The location, number of computers to be made available, timings, and procedure for lodging complaints if any.
12. Recently you read in the editorial column about honour killing practised in the conservative Indian society. Write a letter to an editor drawing attention to the stigma in society.
 13. Through the medium of letter to the editor, you want to share your feelings about the award winning film 'Slumdog Millionaire'. Write a letter to the editor reflecting the fact that this film does not only deal with the down trodden urchins but also want to generate awareness about the imbalances in the country.
 14. You are the coordinator of the English drama club, and you want to stage 'Othello' by Shakespeare this Saturday. Write to the Welfare Division to book the auditorium and get the arrangements done for light and sound system.
 15. Write a letter of declining the invitation to the course coordinator of National Academy of Defense Production who has invited you to deliver the guest lecture on 'Interview Skills'. Invent the necessary details.
 16. Email
 - (a) Should email replace the communication forms such as memos and letters? Explain your answer.
 - (b) Imagine yourself to be the instructor of a course in which 75 students have registered. Draft an email to be sent to all these students asking them to select a topic of their choice and prepare for a professional presentation of 10 minutes duration.
 - (c) As the Sales Manager of a company, draft a reply which has to be sent in the form of an email to three customers who have complained about your product. Invent necessary details.
 - (d) Assume that you are the Managing Director of a company dealing with electronic equipment. Inform all your employees about the new community hall which the company is going to inaugurate next week. Highlight the important features of both the hall and the inauguration.
 - (e) As the Personnel Manager of a multinational firm, draft an email to be sent to those candidates who were not selected in the interview conducted few days before. Take care not to be courteous and sympathetic while conveying the negative message.
 - (f) What are the various email service providers that you have come across? Compare the structure and layout of the email facility offered by them.
 17. The following formal letters are ineffective. Rewrite each of them keeping the principles of business letter writing in mind:

(i)
 Spotless Washing Machines Pvt.Ltd.
 10, Browning Street, Kanpur, U.P.
 Website: swmpl.org Phone: 0123-44455566

23 March 2014

Mr. Vipul Kumar
 35, Race Course Road
 Kanpur
 U.P.

Dear Customer:

Sub: Invalid cheque sent by you

Your cheque sent by you for the balance payment of the washing machine purchased by you a few months ago from us as you had wanted more efficiency in your washing and also wanted to have more choices in terms of color, capacity, model, etc., as compared to the earlier one you had been using for quite sometime has bounced back from the bank today.

It is your duty to check your bank balance before sending the balance payment to us! Now we have to wait for your cheque again for some time.

As you know, we are one of the leading dealers in Washing Machines in Kanpur and we have different types of clients. Some pay in time; some pay on time; but so far nobody has sent a bouncing cheque! Of course, you are one among those who pay the amount in time but what's the use?

Here's your cheque and we expect you to do the needful at your earliest without fail.

Ashish Kumar

Sales Manager

Enclosure: Your cheque

(ii)

11 May, 2014

Avy Trading Corporation

Daryaganj, Vijay Nagar,

New Delhi-110005

Telephon: 011-2345678

Mr Ravi Malhotra

Sales manager, Reva Computers

Ajmer Road, Jaipur-302006

Dear Mr Malhotra

We saw your advertisement in the *The Times of India* about one of your important products. The advertisement caught our attention because we are interested in this product. In fact, we want to equip our corporate office with modern facilities and we would like to buy this product.

However, we cannot send the purchase unless we know more about this product. Send us more information about the product as soon as possible. We want to know many things, which include product specification and special features of this model of the product, details of discount for bulk purchase, an estimate for the cost of the product, and details regarding terms of business and delivery dates.

Respond to this letter as early as possible.

Yours Sincerely

Amit Jain

(iii)

24, Malaya Road

Vellore, India

Commercial Art & Design

Subject: Freelance Graphic Designers for advertising and marketing Campaign Enclosure: Sample copy of graphic Design and Campaigns

Onoff Pvt. Ltd.

Connaught Place

New Delhi, India

Our Reference: MA / 1230

Dear Business owners,

Designing a great marketing piece is a lot like baking a cake. Anyone can throw some ingredients together and plunk them in the oven. But to take a mouth watering, three-layer chocolate cake you need all the right ingredients in just right proportions and the knowledge to put them together correctly.

Our firm provides freelance graphic designers who are highly qualified and trained professionals we are proud to boast that we have a long list of clients. Do you dread the thought of a new advertising campaign for your business? Does the thought of creating a new sales brochure overwhelm you?

Call us today at 09888880000 and let's finalize the deal otherwise you will have to pay a heavy penalty for it. Thanks for your time.

It's time you should be obliged by our services and gives us maximum profits. Great commercial art and graphic design business is just a phone call away.

Director 'Sharma'

Your sincerely

10 May 2014:

Unit Two: Drafting Memos

- Underscore the key item of the résumé, by including the qualities that you possess, but which are not mentioned in the résumé
- Close the letter on a positive note, expressing enthusiasm
- Highlight your abilities by stressing on the accomplishments

General considerations

- Be careful about the name and the address
- Know the head of department
- Apply without delay

Cover letters for résumés are addressed to the individual and not the organization, and hence knowing the name of the person being addressed creates a better impression. Ensure that the spelling of the name is correct. Let the letter be specific and brief.

- Keep the letter short
- Express enthusiasm and interest for the positive
- Highlight your strengths
- Organize the letter in three parts, indicating reference, special qualities and availability at convenient time.
- Start with the central selling point—education or experience—which is going to benefit the company
- Make your keenness for the specific job obvious



Please refer to Exhibits 15.20 and 15.21 for some sample cover letters accompanying résumés. More samples of cover letter are given in the CD.



Refer to the CD also to learn about official letters such as demi-official letters, government letters, and letters to authorities, as well as other formal letters such as letters to the editor, permission letters, thank you/follow-up letters, acceptance/rejection letters, and resignation letters.

MEMOS

There are four important channels through which information flows within the various sections of an organization. Employees can communicate face-to-face, over telephone, through email, or through an inter-office memorandum, which, in short, is called a memo. Memos (or memoranda) are written by everyone from junior executives and engineers to Chief Executive Officers. When you think of a memo, what do you think of? It could be a small piece of paper with a letterhead that says something like:



'From the desk of ...' or 'Don't forget ...' or 'Reminders ...'

The message itself may be very simple—something like:

'Buy more paper clips' or 'Meet with President at 2:30' or 'We are running out of storage space'.

While these memos are informative or persuasive, and may serve their simple purposes, more complex memos are often needed in an office setting. However, even though business memos may be more formal and complicated, the intention in writing one is still the same---to formally communicate within the organization and keep a record of this communication. These are brief written

**EXHIBIT 15.20 Cover letter accompanying a résumé 1**

249, Ashok Bhawan
BITS, Pilani
Rajasthan – 333031

25 November 2014
The Manager
Cisco Private Limited
5th cross, Sebastian Road
Hyderabad
India – 530016

Dear Sir

I was very interested to see your advertisement for a Software Engineer in *The Hindu* (20 November 2014). I have been seeking just such an opportunity as this, and I think my background and your requirements may be a good match. I am very much interested in working as a Software Engineer in your esteemed organization. I enclose my résumé as a first step in exploring the possibilities of employment with Cisco Private Limited.

I have worked as a project trainee in Satyam Computer Services Limited for the past 6 months. I was involved in developing a graphical user interface for Metadata Management System. So I have hands-on experience in Java Swing, Java Security, JDBC, and Oracle.

As a Software Engineer in your organization, I assure you that I will work hard for the improvement of your company. Furthermore, I work well with others.

I would appreciate your keeping this enquiry confidential. Thank you for your consideration.

Yours faithfully

(Gopinath M.C.)

Enclosure: Résumé

EXHIBIT 15.21 Cover letter accompanying a résumé 2

311 Nelson Street
West Lake Circle, Jaipur

June 6, 2014

Ms Vibha Acharya
Engineer
ACE Monitoring and Analysis, Inc.
P.O. Box 233, Mumbai

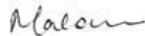
Dear Ms Acharya

Dr Samuel Johnson, a consultant to your firm and my Organizational Management professor, has informed me that 'ACE Monitoring and Analysis' is looking for someone with excellent communications skills, organizational experience, and leadership background to train for a management position. I believe that my enclosed resume will demonstrate that I have the characteristics and experience you seek. In addition, I would like to mention that my work experience last summer makes me a particularly strong candidate for the position.

As a promoter for Sansui Training at the 2013 Singapore Show, I discussed Sansui's products with marketers and sales personnel from around the world. I also researched and wrote reports on new product development and compiled information on industry trends. The knowledge of the mass communication industry I gained from this position helped me analyse how Sansui products can meet the needs of regular and prospective clients, and the valuable experience I gained in promotion, sales, and marketing would help me use that information effectively.

I would welcome the opportunity to discuss these and other qualifications with you. If you are interested, please contact me on my cell number 98292 27400. I look forward to meeting with you to discuss the ways my skills may best serve 'Aerosol Monitoring and Analysis'.

Sincerely,



(Mohan Gokhle)

Enclosure: Resume



communications circulated within an organization. They not only facilitate communication about various operations, but also play an important role in arriving at some quick decisions. For example, the production manager of a fabrics company can decide which type of fabric needs to be produced more on the basis of information provided in a memo from the marketing manager.

Memos also help solve problems either by informing the reader about new information, such as policy changes, price increases, etc., or by persuading the reader to take an action, such as attend a meeting, use less paper, or change a current production procedure.

Inter-office memos enable the flow of information in all the three types of organizational communication, namely vertical, horizontal, and diagonal. The President of an organization can send a memo to the Vice President (vertical), a Vice President of one division can send a memo to the Vice President of another division (horizontal), or the President can send a memo to an employee directly without going through the hierarchical set-up inside the organization (diagonal).

In short, memos help in bridging the communication gap among the various sections of any organization and also serve as permanent record of information.

Classification and Purpose

No other kind of written communication reaches so many people at so many levels as does a memo in an organization. The larger the organization and the more levels of authority it has, the more inefficient phone calls and face-to-face discussions become. A memo is a good way to reach many people at once. Of course email is nowadays used in most organizations to convey information in whatever written form you may choose—memo, circular, or notice.

A memo is important not only because of its frequency of use and the wide range of subject matter that can be presented in memo form, but also because it represents a component of interpersonal communication skills within a work environment. To write effective memos that will contribute to efficient functioning within the organization, one has to keep in mind the purpose of writing the memo and the readers' interest. One also needs to take care of the organization of information, completeness and tone while writing an effective memo.

Depending on their purpose, memos can be classified into **three major categories**:

- Documentary
- Congratulatory
- Disciplinary

Documentary memos

As the name suggests, these memos are mainly used for conveying information, such as memos written to a subordinate to remind, to announce, to give instructions, to explain a policy or procedure, to a peer or superior to make a request or routine recommendation, or to confirm an agreement. For instance, a memo explaining the new method of maintaining medical records of employees in an organization, requesting the head of another division to provide additional manpower for shifting some huge machines, providing some suggestions for improving the existing billing system—all fall under this category. Short reports also can be submitted in the form of documentary memos. Such reports are called memo reports. These are discussed in Chapter 13.

Congratulatory memos

Memos are also used to give credit to employees of an organization for the outstanding work they have accomplished. It is appropriate for the Vice Chancellor of a university to send a

Uses of Memos

1. To request for action or information. This allows one to have a written record of the request. As compared with an oral request, this type of written request is more difficult for the audience to forget or ignore.
2. To explain to the reader something that is not understood. The purpose in this case is to clarify something to the reader.
3. To announce or to give formal notice to readers, publicly informing them about new procedures, new products, or anything that needs to be publicly known.
4. To confirm the details of a meeting, conversation, or telephone call. This would enable one to have a written record of decisions or agreements that were made.
5. To suggest solutions to business problems, to offer one's services or those of the department, or to bring up new ideas or methods of doing things.
6. To report the details of a project at regular intervals as a way of helping the organization keep track of progress and problems

memo to the faculty members congratulating their outstanding contribution to the field of research. Similarly, employees can also send their compliments in the form of a memo to their officers, for the awards or achievements that the latter may have earned.

Disciplinary memos

When employees violate the rules or breach the code of conduct in an organization, they will be served either with a severe warning or any other punishment as decided by the management. The memo conveying this action is known as a disciplinary memo. For instance, a memo may be issued to an officer who has accepted a bribe from one of the customers.

Structure and Layout

Standard memos are divided into five main segments to organize information and to help achieve the writer's purpose. However, depending on the requirements, we may need to add two more segments, one for attachments and the other for distribution of copies.

- Heading
- Discussion
- Signature
- Distribution (optional)
- Opening
- Closing
- Necessary Attachments (optional)

Organizations generally provide printed memo forms to their various divisions, which contain all the segments mentioned above. A sample template is given in Exhibit 15.22.

Heading

The heading segment follows this general format:

- Name of the organization and address (Printed Letterhead)
- Date: (Complete and current date)
- To: (Designation of the recipient)
- From: (Designation of the sender)
- Subject: (What the memo is about, highlighted in some way)

Since memos are used for communication within the organization, it is enough if the designations of the sender and the recipient are mentioned against To and From in the layout.

Subject: SUPERVISORS

National Steel Industries Ltd 12, Gandhi Marg, New Delhi 110002	
Interoffice Memorandum	
DATE:	
TO:	
FROM:	
SUBJECT:	
_____	(Opening)

_____	(Discussion)

_____	(Discussion)

_____	(Closing)
Signature	
Attachments:	
Distribution:	

Such a subject line gives a vague idea about the contents of the memo, but lacks focus. A better subject line for this would be:

Subject: SALARY INCREASE FOR SUPERVISORS

A few more samples of subject lines are given below:

- PERMISSION TO CHANGE PROCEDURE
- REQUEST FOR FOUR MACHINES
- DETAILS OF TRAINING PROGRAMME
- TERMINATION OF SERVICES
- ARRANGEMENTS FOR THE CONFERENCE

You may find that the topic and the main focus are connected by a preposition in all these examples. Such a combination works well in all subject lines and clarifies the actual subject matter of the memo to the reader.

Opening

The purpose of a memo is usually found in the opening paragraphs and is presented in three parts: **the context and problem, the specific assignment or task, and the purpose of the memo.**

The context is the event, circumstance, or background of the problem being resolved or the topic handled in the memo. The first paragraph establishes the background. State the problem or simply the opening of a sentence, such as, 'In our effort to reduce the absenteeism in our Division' Include only what your reader needs, but be sure it is clear.

In the task statement, the steps taken to help resolve the problem must be mentioned. If the action was requested, the task may be indicated by a sentence opening such as, 'You asked that I look at' To explain our intentions, we might say, 'To determine the best method of controlling the percentage of absenteeism, I took recourse to three methods'

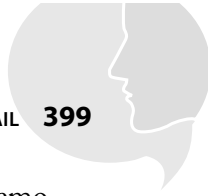
Finally, the purpose statement of a memo gives the reason for writing it and forecasts what is in the rest of the memo. Make sure that this statement is forthright and explains to the reader exactly what is in store. For example, we might say: 'This memo presents a description of the current situation, some proposed alternatives, and my recommendations.' If one intends using headings for the different memo segments, the major headings can be referred to in the forecast statement to provide a better guide for the reader.

Some guidelines for the memo's opening segment:

- Include only as much information as is needed by the decision makers in the context, but be convincing in establishing that a real problem exists. Do not ramble on with insignificant details.
- If one has trouble putting the task into words, consider whether you are clear in the mind about the situation. More planning might be required before writing the memo.
- Ensure that the forecast statement divides the subject into topics most significant to the decision maker.

To summarize the opening segment, the memo should start with one or two clear sentences informing the reader of the need and purpose of the communication. For instance, the introductory paragraph of a memo from the Manager of the Training Division of a company to the Vice President of that company may contain the following few lines:

As directed by you in your memo dated 21 July 2014, I analysed the possibilities of offering a three-week training programme to our supervisors. I am submitting my views on organizing this programme in the lines that follow:



Generally, when we write a memo requesting somebody to provide something, the memo may be very short, and hence need not contain a separate introductory paragraph. In this case, the introduction and discussion would be combined as shown below:

As directed by our President, we are trying to complete the work by tonight. To accelerate the pace of work, I request you to spare two computers for tonight only.

Discussion

The discussion segment is **the part where we develop the arguments that support our ideas.** For example, if a memo is being written to a superior who has asked for an analysis of the feasibility of offering some new services to employees, the details of the analysis can be explained in this section. If one has to direct a subordinate to conduct a survey on the effectiveness of the new machines introduced in the division, the specific details regarding the aspects that need to be examined can be mentioned in this segment. Since very few readers read every line of the memos they receive, keep the communication brief.

The following two examples will show you how the discussion segments of a memo appear:

Example 1

I personally went to the reprography section of our institute and found out that the photocopier is not effective because of the poor quality of stationery used. The paper used is very thin and hence the impressions of one side fall on the other.

Example 2

Our committee examined the case and the details are given below:

1. Adequate quotations were not received for the purchase of the two machines. We found out that there are five dealers for the sale of these machines in our locality.
2. The machines were not properly checked as soon as they were received. They were sent to the production division directly.
3. The Purchase Manager does not have adequate explanations for this casual action.

Closing

After the reader has absorbed all of the information, close with a courteous ending that states the actions expected from the reader. Always consider how the reader will benefit from the desired actions and how those actions can be made easier. For example, we might say, 'I will be glad to discuss this recommendation with you during our Tuesday trip to Delhi and follow through on any decisions you make'.

A memo can end with some complimentary remarks or directive statements. While a complimentary close motivates the readers and makes them feel happy, a directive close tells them what exactly is to be expected or what they have to do next. Here are examples of these two types of closing statements.

Complimentary Close

- If our results continue to improve at this rate, we will attract more students during the coming years. Congratulations!
- Please accept my compliments for introducing this new computing system in your Division.
- There is no doubt that your conscientious efforts would help us accomplish our task without any difficulty. Keep it up!

Hints on the Discussion Segment

1. Begin with the information that is most important; i.e., start with the key findings or recommendations.
2. Follow the inverted pyramid pattern of communication. Start with the most general information and move to the specific or supporting facts.
3. Try to make the text more reader-friendly by applying boldface type, headings, columns, and graphics.
4. For easy reading, list the important points or details rather than writing in paragraphs when possible.
5. Be careful to make lists parallel in grammatical form.

Directive Close

- I would like to resolve the issue only after hearing from you. Hence, kindly inform me before 25 August 2014.
- To complete your analysis in time, our Finance Manager would provide the necessary data tomorrow, 23 August 2014. Please bring along with you the registration details of the newly acquired land.

Necessary attachments

Make sure all findings are documented to provide detailed information whenever necessary. This can be achieved by attaching lists, graphs, tables, etc. at the end of the memo. Be sure to refer to the attachments in the memo and add a notation about what is attached below the closing, like this:

- Attached: Director's approval letter
- Attached: Several Complaints about Product, January–June 2014
- Attached: List of absentees on 17 July 2014

Distribution

This last segment is used to mention the designations of those people to whom a copy of the memo has been sent. As already said, this segment is not mandatory in a memo. The short form of complimentary copy, that is, Cc, can also be used instead of the word *distribution*:

Distribution:

Assistant Manager, Operations
Supervisor, Manufacturing

Distribution:

All Associate Professors

Cc: Personnel Manager with a request to circulate among the employees
Budget Officer
Assistant Manager, Finance

Style

Regarding the style of memos, the organization and the individual's relationship with the readers suggest the degree of formality or informality that should be adopted in a memo. In some companies, a formal style is expected; in others, a handwritten note or informality in style is the rule.



Useful Tips to Prepare Memos

1. Use the standard format or the one prescribed by the organization.
2. Include all the necessary segments.
3. State clearly the context and purpose in the opening segment.
4. Keep in mind your relationship with the recipient to choose the degree of formality.
5. Maintain a positive tone.
6. State in the closing segment what action is expected from the recipient.
7. Use features like highlighting, bold face, etc. to draw attention.
8. Keep the memo short.

Some bosses—those who believe in the importance of upholding status distinctions—want memos to sound formal and distant in a way that is appropriate while communicating to a superior. Others—those who have an open and participative approach to managing—would prefer the use of first person, contractions, and even sentence fragments to create an informal and conversational style. While writing a memo, therefore, one may choose the style that suits the organizational culture, but keep in mind that a friendly tone and courtesy are always required to suggest an association with the reader.

Generally, the tone is kept neutral or positive, but one may occasionally have to issue complaints or reprimands in memo form. Use caution in negative situations, and be aware of the effect of the correspondence. If the communication is spiteful, blunt, or too coldly formal, it might annoy the recipient. Flowery language, excessively technical jargon, or complicated syntax will make one sound pompous. Therefore, one should aim to sound cordial, straightforward, and lucid. Develop a relaxed and conversational style without being too chatty. Projecting an image of consideration creates a greater chance of being viewed as knowledgeable and competent in carrying out the professional responsibilities.

Ensure that a memo is as short and to-the-point as possible. Whether the news is good, bad, or neutral, address the issue in the opening segment. If the memo is lengthy, provide an indication of its organization in the opening segment. Exhibits 15.23 and 15.24 illustrate a memo. The CD contains more samples.

EMAILS

The phenomenally rapid growth of the Internet and its widespread use in business has changed the way in which organizations communicate. All organizations have Internet access, and most individuals have a personal email address. Many companies are promoting the use of email for most—if not all—in-house correspondence, and a great deal of communication with outside organizations also relies on email.

Email stands for electronic mail. These are digital messages that can be sent through an Internet connection. Email offers some tremendous advantages. It is fast—a message can be sent to as many people as necessary instantaneously. It is inexpensive, as it saves paper and is promoted in most organizations as a green initiative. It is convenient and saves time. When dealing with external agencies, especially important clients, it is the most unobtrusive mode of communication, as the recipients can read it at their own leisure and pace, and respond after due reflection.

Unit Three: Writing for Job Application

In a Nutshell

- Use your voice effectively to express your genuineness.
- Always greet the interviewer with enthusiasm.
- Do not answer questions with one word. Try to give details of your area of expertise. Keep notes handy. If necessary, prepare a write-up on your responsibilities and refer to it during the interview to make sure that you do not forget anything.
- Do not use any words of your native language.
- If you have not understood the question, ask the interviewer politely to repeat/elaborate.
- Avoid repeating yourself.
- Do not raise your voice during the interview.
- Exhibit appropriate non-verbal cues while listening and speaking.
- Do not interrupt the interviewer while he/she is talking.
- When talking about your project, instead of trying to sell the product or your present company's capabilities to him, explain how you went about doing it and sell your capabilities to him/her.
- Even if the interviewer appears to be asking trivial or irrelevant questions, take all of them seriously. Maybe he/she is trying to check your communication skills.
- Do not ask the interviewer any personal questions.
- At the end of the interview, always thank the interviewer for his/her time.

Let us now discuss the most important aspect of preparing for interviews—résumé.

RÉSUMÉS



'Let's hire this lady right away. Wait! This is my Résumé.'

Résumés are technical as well as marketing documents that present the candidate's past and present performance to the prospective employers so that they can assess his/her future potential. In fact, a prospective employer forms his or her first impression of the candidate from the résumé. Of course a good résumé is not sufficient to get a job; but it can help the employer to shortlist the candidates to be considered. Employers usually have more applications than they can handle, and hence, they naturally look for ways of narrowing down the candidates to a manageable number. An effective résumé will put the candidate into that shortlist.

A cover letter is an essential accompaniment to résumés. Chapter 15 discusses covering letters in detail.

Résumé, Biodata, and Curriculum Vitae

Although the terms résumé, biodata, and curriculum vitae (CV) are synonymously used, they differ from each other in certain aspects. In French, résumé means summary. It is usually one page long, but may extend to two pages sometimes. It includes the gist of an individual's education, past employment, and skills for the new position. The features of a résumé include the following:



- Written in points
- Objective and formal in approach
- Written in third person
- Name and address of the applicant
- Summary of educational qualification
- Employment history
- Professional affiliation
- Skill sets

A résumé is suited for any position in an organization. Personal information such as age, date of birth, marital status, nationality, and gender are generally not included in a résumé. It is suitable for almost all types of organizations. It can also be modified according to the skill sets required by a particular job. For instance, if engineering students wish to apply for the post of a software executive post, they may highlight their skill sets in software.

A biodata is a shortened form of biographical data, and has now become an obsolete term. In this format, the emphasis is on personal details such as date of birth, nationality, marital status, gender and address. The applicant's hobbies may also find a place in a biodata. These details are followed by the educational qualification, work experience, and skills for the job.

A curriculum vitae contains all the elements of a résumé but it is more detailed in terms of the academic credentials. It is generally used for a position in a research organization or when the candidate applies for a research fellowship. A CV contains a detailed account of all the papers published, papers presented at the conferences, and research projects carried out. On the other hand, a résumé may just mention the number of conferences attended/ number of papers published/a brief summary of the projects carried out. We can say that a CV is more knowledge-oriented whereas a résumé is more skill-oriented.

Résumé Design and Structure

A résumé should present a brief summary of the candidate's personal details followed by details such as career objectives, educational qualifications, professional and technical skills, and extracurricular activities and achievements. It should not be very long, as the applicant will get the opportunity to present detailed information if shortlisted for the interview.

Appearance and elements

A résumé, like every important business document, should be impeccable. Any mistakes or sloppiness here could raise doubts in an employer's mind regarding the person's capability. The purpose of the résumé is to get called for an interview. It must be well-organized so that vital information is readily accessible.

A résumé should reflect the professional image that we want to create. It should be:

- Neat and error-free with no whiteouts or hand corrections;
- Legible and well-spaced;
- Printed on good quality paper of A-4 size; and
- Reproduced clearly on a high-quality printer or copy machine.

There is lot of debate on the ideal length of a résumé. The general notion is that the more the achievement in life, the lengthier the résumé. However, the ideal length for résumé is around one page, and it should never exceed two pages. Employers are often unimpressed with longer résumés that are hard to read and can seem padded, especially when they come from people with comparatively little job experience. A long résumé may even prompt your disqualification early in the selection process. All the details can be mentioned in brief. A concise, but complete résumé saves the reader's time and hence is more effective. If the employer needs further detail, it can be provided in the second round.

While résumés can be organized in more than one way, they will almost always contain the same basic information. Résumés are not autobiographies. The purpose is to gain the opportunity for an interview, and not to give a detailed history.

Personal information

The first thing an employer needs to know is who you are and where you can be reached. So include your name, address, phone numbers, email address, and website under this heading. Make sure that the information allows an interested employer to reach you easily. If you are currently employed, this can be difficult and delicate. Career specialists recommend that you proceed ‘carefully and cautiously’ and set up boundaries to keep your job search out of your current employment. You may not want to list your current business phone or business email. A personal email address and home or cell phone is preferable.

One might set up a separate email account especially for seeking employment. Ensure that it sounds professional and does not sound frivolous. An email ID like volcano2000@hotmail.com may be okay for personal use, but a prospective employer might not like it. A permanent postal address should be provided, indicating how long the address will be valid (i.e. ‘until June 31’).

Career/professional objective

This element is optional. However, most employers agree that a statement of professional objective should be included in a résumé. While stating the objective, make it effective by being as specific as possible about the requirement or aspiration. For example,

Entry-level position in design and development of microprocessor circuitry; eventual advancement to position as project leader or technical manager.

A software sales position involving international experience in a growing company.

Education/academic preparation

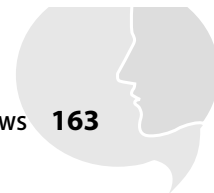
While applying for a job when one is about to graduate, educational qualification and experience are the highest selling points. Employers are usually interested in learning about the candidate’s academic training, especially education and training since high school, degree earned, major and minor fields of study, courses or projects done, and also the practical experience gained during graduation.

Begin with the most recent education and work backward. If the information will be helpful and if space permits, we may consider listing notable courses taken. If the grade-point average of the candidate is impressive, it should be included. Finally, note any honours earned. If the individual has received awards for other accomplishments, all achievements can be listed in a separate section entitled ‘Awards and Honours’.

Work experience/professional skills

A prospective employer would always be interested in a candidate’s past work experience. When describing work experience, list jobs in chronological order, with the present or last one first. Include any part-time or summer internships or projects done, even if unrelated to the career objectives. It demonstrates the person’s ability to get and hold a job—an important qualification in itself.

Each entry in this heading includes the name and location of the organization where one has worked or completed an assignment, the job title/designation, the duration of work, and also a brief summary of the work.



There is no need to use complete sentences; phrases will suffice. Be sure to use very concrete language, including technical terminology, to describe the work experience. Place this section either before or following the section on education, depending on which will be most important to an employer.

Activities, achievements/special interests, aptitudes, memberships

Most employers want to know about special abilities that will make an individual a more valuable employee. These include professional courses undertaken, community service/volunteer activities, languages known (written and spoken communication), knowledge of handling special equipment, relevant hobbies, and so on. The key here is to include only information that the employer will find useful, and that casts the candidate in a favourable light. Activities can be grouped into categories such as College Activities, Community or Social Services, and Seminars and Workshops.

Mention awards or honours received. Give details regarding the nature of the award, the activity for which the award was received, date or month and year of receiving, and also the authority from whom the award was received.

If we belong to any organizations in our field, those can be listed under 'Memberships'. Be sure to include any offices or committee appointments held.

References

This section should always be the last one in a résumé. For space and privacy considerations, one may simply include the phrase 'References available upon request' and supply the names only when and if asked for, as employers rarely investigate references until the candidate is under serious consideration.

If, however, the references are impressive enough to merit listing, follow these basic guidelines. Choose only the three or four people who combine the best elements of familiarity with the work and a credible position. A reference from a celebrity who barely knows you is not as good as one from an unknown person who has worked closely with you. In any case, do get permission beforehand from the people listed as references.

Types of Résumés

There are three types of résumés: *chronological*, *functional*, and hybrid (also called *combination résumé*). Each type has its own advantages, and the one we choose will probably depend on the specific job description that we apply for and our past accomplishments.

Chronological résumé

The chronological résumé emphasizes education and work experience and is most effective when such experience clearly relates to the job we are seeking. Within the categories Education, Work Experience, and Related Experience (if there is such a section), list entries in reverse order, beginning with the most recent experience. Under each position listed under Work Experience, describe responsibilities handled and accomplishments, emphasizing on relevant experience with the skill set required for the job that one seeks. In case of recent graduates, listing the education first makes sense. The chronological approach is the most common way of organizing the information in a résumé, and it is preferred by most employers.

Functional résumé

The functional résumé features the skills that the candidate has got (organizer, researcher, manager, etc.). It provides examples of the most significant experiences that demonstrate these abilities. This résumé emphasizes individual fields of competence and is hence used by applicants who are just entering the job market, who want to redirect their careers, or who have little continuous career-related experience. In a nutshell, it demonstrates the applicant's ability to handle the position they are applying for.

While drafting a functional résumé, follow the Skills category immediately with a chronological Work History and a scaled-down Education section that lists only institutions, degrees, and dates. Either of the latter two categories may come first, depending on whether most of the skills and experience were gained in college or on the job.

Hybrid/combination

A combination résumé includes the best features of the chronological and functional résumés. However, this type is not popular or not commonly used as it tends to be very long and also it may turn out to be repetitive in nature. Whatever the format, strong résumés possess the same qualities:

- They focus on the employer's needs.
- They are concise.
- They are honest.

Exhibit 8.1 shows a sample résumé.



Refer to the CD for another sample of résumé.

Scannable Résumés

A scannable résumé refers to a document that has been formatted in such a way that it can be successfully scanned using optical character recognition (OCR) technology. It is also known as a *plain text résumé*, as the technology used recognizes only the text and not any fancy fonts, bullets, italics, or other ornamental features of the résumé.

Though the contents of a scannable résumé may be similar to that of a print résumé, it is prepared in such a way that all the required information can be easily scanned and loaded into electronic programs. Scannable résumés save time as employers can quickly go through all résumés when there is any vacancy, with the help of the search option. Many employers prefer soft copies of the document, as it is easier to access them. PDF (portable document format) résumés are in vogue, as the setting in these documents does not get disturbed. Many organizations have their own format for résumés, which just have to be completed and submitted.

Scannable résumés differ in format from traditional résumés. They require just simple text and, as mentioned earlier, do not involve the use of underline, bullets, bold fonts, box or table items, columns, etc. They include key words which are not generally found in traditional résumés. In addition, they may run into even three or more pages, whereas traditional résumés are generally restricted to one or two pages.

Once received, the résumé is scanned into an electronic résumé database with the help of OCR software. A scannable résumé assists employers in selecting the right person by using existing databases to quickly match the applicants skills to suitable job openings.

EXHIBIT 8.1 A sample résumé

Gopinath M.C.
 Email: gopinath_mc@yahoo.co.in
 Mail: 248, Ashok Bhawan
 BITS, Pilani
 Rajasthan
 India – 333031

Objective

- To associate myself with an organization that provides a challenging job and an opportunity to prove innovative skills and diligent work
- To be involved in providing software solutions to enhance network security

Professional Experience

Project Trainee (July 2009–December 2009)

Satyam Computer Service Ltd, Hyderabad

Project: Metadata Management System

Description: Metadata Manager is a tool to create and maintain data marts. It creates a centralized metadata repository to store all the details about data marts.

Databases, Technologies & Languages used: Oracle, Swing, JDBC, Java Security, XML, PL/SQL, Java.

Responsibilities

- Designed a database in Oracle to hold metadata.
- Designed an appropriate graphical user interface for the system.
- Led in the design and development of Security System for this application.

Project Details

Implementation of secure File Transfer System (January 2009–May 2009): It involves the design and implementation of Kerberos for File Transfer Protocol in C language.

Kerberos improves the security of FTP by preventing replay attacks and IP spoofing. It uses DES for encrypting the packet that reduces the processing time when compared with RSA.

So the performance of FTP is not degraded.

Learning Aids Development (January 2010–May 2010): It involves the design and development of applets for BITS Virtual University. It includes the analysis of security vulnerabilities of applets.

Courses Done

- Network Security
- Computer Networks
- Network Programming
- Telecommunication Switching Systems and Networks

Educational Background

Degree of Examination	Name of the Institution or School	Year	Division
*M.E., Software Systems (Final Year)	Birla Institute of Technology and Science, Pilani, Rajasthan	2009–present	
B.E. (Hons), Electronics and Instrumentation	Birla Institute of Technology and Science, Pilani, Rajasthan	2005–2009	First Division with 72%
Higher Secondary Examination	Bharathi Vidya Bhavan, Erode, Tamil Nadu	2003–2005	Distinction with 97%

*Pursuing

Page 1

(Contd)

EXHIBIT 8.1 (Contd)**Software Skills**

- Programming languages: C, C++, Java PERL, and Assembly/Machine Language
- Technologies: HTML, Java Security, JDBC, Swing, XML, SQL PL/SQL, and GNU Make.
- Operating Systems: Linux (extensive experience), UNIX, Windows 95/98/NT, DOS
- Security experience: Have helped to uncover multiple serious security holes in the LAN network and to build Firewalls.

Accomplishment

Achieved a transfer of degree from B.E., (Hons) Electronics and Instrumentation to M.E., Software Systems.

Personal Details

Date of Birth: 28 April 1981
 Marital Status: Single
 Languages Known: English and Tamil
 Permanent Address: 1329 –A, KK Nagar First Street,
 Kalingarayanpalayam,
 Bhavani, Erode District, Tamil Nadu,
 India – 638316.

References

- Mr Munikumar
System Analyst,
Satyam Computer Service Ltd, Hyderabad, Andhra Pradesh, India
- Mr Sunil Pal
Senior Software Engineer,
Satyam Computer Services Ltd, Hyderabad, Andhra Pradesh, India
- Mr Madhu Manohar
Senior Software Engineer,
Satyam Computer Service Ltd, Hyderabad, Andhra Pradesh, India

Page 2

The following are some tips that one should keep in mind while preparing a scannable résumé (see Exhibit 8.2):

EXHIBIT 8.2 Scannable résumé

S. SRICHARAN

PHONE + 9 1 - 9529445673 • EMAIL SRICHARANSIYER@GMAIL . COM
ROOM NO 262 , RANAPRATAP BHAVAN , BITS - PILANI – 333031

BE (Chemical Engineering) & MSc Chemistry, 2005--2010

EDUCATION

- BITS, Pilani
- 6.34 (at the end of 9th sem)

INTERNSHIPS

STERLING BIOTECH LTD, VADODARA (INDUSTRIAL TRAINING)

July 2009 – Dec 2009

- World's Largest Gelatin Producer
- Worked on the development of media composition, optimization, and scale up of growth media for industrial fermenter (160,000 liter fermenter). Associated design characteristics for effectiveness of the fermenter were also studied.

INDIAN INSTITUTE OF SCIENCE, BANGALORE

June 2008 – July 2008

- Simulated and studied the sensitivity and control analysis as well as behavior of cells in signaling pathway using CoPaSi (Complex Pathway Simulator). The study also worked on the pharmacokinetic model to understand the parameters to reduce the unwanted absorption of drugs.

NATIONAL METALLURGICAL LABORATORY, CSIR CAMPUS, CHENNAI

May 2007 – July 2007

- Achieved breakthrough in a project for Govt of Bangladesh to remove arsenic from drinking water by proposing a novel mechanism for their separation. The project has been implemented and is now being used for water treatment.

ACADEMIC PROJECTS

Project 1: Extractive separation and determination of chromium in tannery effluents

- Work published in Journal Of Hazardous Chemicals (2009)

Project 2: Currently pursuing a study on 'Market parameters and resources for effective advertising in chemical and pharmaceutical industries'

Project 3: Application of nanomaterial in drug discovery and selective drug delivery research.

ACADEMIC ACHIEVEMENTS AND AWARDS

Awarded the INAE (Indian National Academy of Engineering) summer fellowship for my work at the Indian Institute of Science

- TEAM LEADER, United Way of Baroda (an umbrella NGO that manages 140 other NGOs)

Page 1

(Contd)

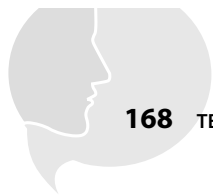


EXHIBIT 8.2 (Contd)

POSITIONS OF RESPONSIBILITY

- CULTURAL SECRETARY of my hostel-Organization and Hosting of 'INBLOOM', an intra-BITS cultural festival
- SENIOR CORE MEMBER, Department of Sponsorship and Marketing for sports meet
- Played pivotal role in signing a 5-year deal with Adidas to supply sports accessories for the meet. Also worked on routine sponsorship acquirement for a budget of Rs 8 lakh.
- SENIOR CORE MEMBER, Department of Informalz, during the annual cultural festival on campus
- PROFESSIONAL ASSISTANT, for the course Main Trends in Indian History

EXTRA-CURRICULAR ACTIVITIES AND ACHIEVEMENTS

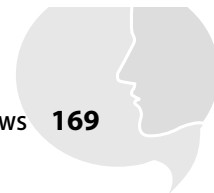
- Black Belt (Sho-Dan) in Shutokon Style Karate
- Runner-up at the India Quiz
- Hosted a number of quizzes
- Silver medal for Shot-Put in Bosm 2007

OTHER INFORMATION

- Fluent in 5 Indian Languages and German.
- Course topper in Modern Analytical Chemistry and Main Trends in Indian History

Page 2

- Always use capital letters for section headings
- Use any font size in the range of 11 to 14.
- Avoid decorative fonts
- Do not use special characters such as bullets
- Avoid using tables, any kind of graphics or shading, etc.



- Do not try to make the résumé noticeable by using underline, shadows, italics, etc.
- Always give white space while ending one topic
- Left justify the text
- Jargon can be used, if required, but they should be specific to the organization with which employment is being sought.
- Place the candidate's name at the top of the page



The CD includes another sample scannable résumé.

Non-traditional Résumés

The résumés discussed in the preceding section fall under the traditional résumé category, whether they are printed, sent through email, or scanned, as these focus primarily on providing a large amount of information about the applicant. Traditional résumés generally do not have the scope of using visuals/illustrations such as graphs, pictures, expressions, etc. Most of the traditional résumés include the applicant's photograph that serves as the only visual element. On the other hand, non-traditional résumés may serve better in making a good impression to the prospective employer about the applicant. However, both traditional and non-traditional résumés have their own pros and cons. Though the latter have become popular in Western countries, they are still striving to gain momentum among the Indian applicants. As the future job market may belong to non-traditional résumés, let us try to understand them in some detail.

Non-traditional résumés can be made available for the employers in various forms and through various channels. Your LinkedIn profile, though considered as non-traditional, may resemble an online résumé that looks more or less like your traditional résumé. Infographics, portfolios, video résumés, etc. are some other types of non-traditional résumés. They become social résumés when they are uploaded on social networks such as Facebook, LinkedIn, WordPress, etc., so as to enable the prospective employers to get an idea about your profile.

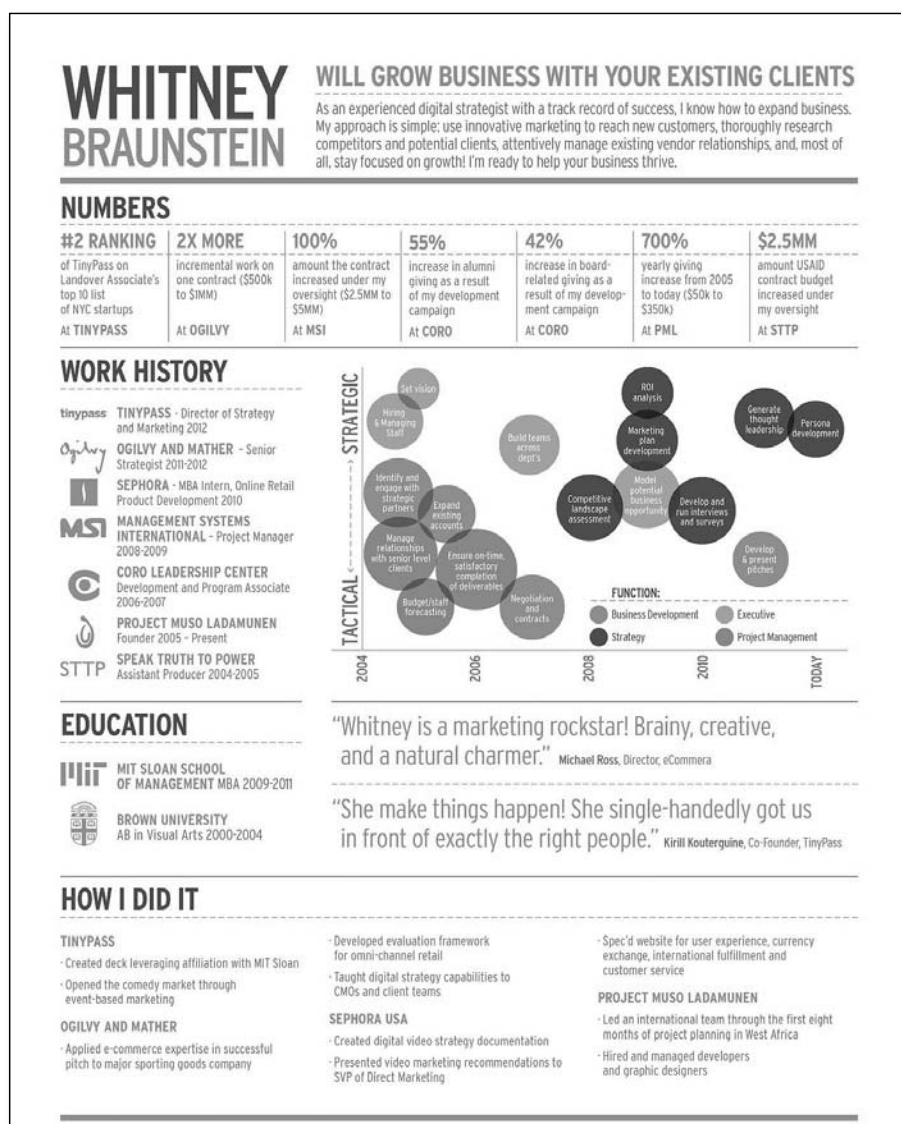
LinkedIn résumé/profile

One of the most widely used social networking sites LinkedIn helps you in professional networking. Available in many languages, this site enables you to create your profile and connect with other professionals. Once you have registered on LinkedIn, you can invite any other person to join the group. You can get to see the job and business opportunities through your primary and secondary connections. The prospective employers may get to see your profile on search. It is like your online résumé wherein you can add infographics, videos, etc. to highlight your achievements. You can request people to recommend you for an admission, assignment, job, etc. and also endorse you for your skills and achievements.

Infographic résumé

The word *infographic* is a combination of information and graphics. As we are aware, graphics are nothing but visuals that are used to catch the attention of the viewers. These visuals can be photographs, charts, graphs, diagrams, tables, etc., which can provide information about your personality, skills, and achievements. If you create an infographic résumé, you can share it with your connections on social networks and prospective employers. This non-traditional form of résumé can accommodate a lot of information in much lesser space than that is used by traditional résumés as shown in the Exhibit 8.3.

EXHIBIT 8.3 A non-traditional résumé



Source: <http://haganblount.com>, accessed on 28 October 2014. Used with permission.

Portfolio résumé

A portfolio is a collection of personalized documents or materials, which serves as a record of our professional development and a proof of your performances. For instance, your portfolio may contain your latest CV, certificates of various nature, videos that showcase your presentation skills, pictures of the work you have accomplished, etc. It is a good practice to create a portfolio and update it from time to time so that you can keep it as a record and use it for various purposes. From this portfolio, a brief version containing very important and recent materials can be created for your interviews because your interviewers may not have the time to go through the entire thing. In fact, this interview portfolio should include the best examples of your academic and professional achievements, and experiences. Look for the right time and opportunity to use your portfolio during your interview. Electronic portfolios can also be created and shared with your prospective employers. The site <http://www.pampetty.com/profportfolio.htm> may help in providing certain guidelines for preparing your portfolio résumé.

Video résumés

Video résumés are short videos created by the applicants to present themselves to the viewers. They generally last for two to three minutes and hence cannot serve as a complete résumé. A video résumé supplements or reinforces the highlights presented in the traditional résumés or admission essays. For example, the Young Leader Programme (YLP) run by the Indian School of Business (ISB) asks the applicants to send a short video presenting their brief profile along with other documents. The following are a few important tips that may help you in preparing your video résumé:

- Plan thoroughly before shooting your video. Note down all the points you need to cover. Rehearse speaking them with enthusiasm.
- Take care of your appearance; wear professional attire.
- Look into the camera while preparing the video.
- Record your video in a quiet place where there is no background noise.
- Keep it short, approximately of two to three minutes.
- Don't speak fast thinking that you would be able to cover more information in a shorter period of time.
- Begin by telling your name and current position, etc.
- Present the highlights of your résumé.
- Say why you are the best for the assignment/position applied.
- Conclude by thanking the viewers for giving you this opportunity.
- Once recorded, view it carefully and ask your friends to review it.
- Create a link to your video and mention this link in your traditional and other résumés.

You can watch a sample video résumé at <https://www.youtube.com/watch?v=71-HNXa5eHw#t=12>.

MEDIA INTERVIEWS

Media interviews are an important aspect of public relations. Such interviews can do a lot to promote business or government policies, and create awareness and acceptance of sensitive issues concerning the public. These can be in the form of print, radio, or television interviews, each mode with its distinct pros and cons. Generally, media gets prior appointment for the interview and also informs about the topic focus. However, if they call up without any notice, you can certainly ask for time—at least an hour or so. The following guidelines will help you successfully tackle interviews to the media.



- Be clear with your message and be ready with your points.
- Stay cool and smile.
- Ignore the camera and maintain eye contact with the interviewer/reporter.
- Correct errors in questions. For instance, if the interviewer asks, 'How many courses do you offer in your three campuses?' If the number of campuses is incorrect, you may interrupt and say, 'Please note, we have FOUR campuses'.
- State the most important information first and then provide the background.

Unit Four: Instructions and User Manuals

Contrast Contrast properties with the properties of others to reveal their significance.

Structure

Format Clarify the text with

- (a) *Heads* Identify topics with clear, nested section headings.
- (b) *Lists* Itemize related features with indenting and marks.
- (c) *Figures* Integrate figures and text with labels and references.

Verbal cues Guide the reader through the instructions with

- (a) *Parallelism* Use parallel words and phrases for parallel ideas.
- (b) *Proleptics* Use verbal links (*also*, *but*, *however*, etc.) to signal how the description fits together.

Checklist

As you reread and revise your instructions, watch out for problems such as the following:

- Make sure you provide real instructions—explanations of how to build, operate, or repair something.
- Write a good introduction—in it, indicate the exact procedure to be explained and provide an overview of contents.
- Make sure that you use the various types of lists wherever appropriate. In particular, use numbered vertical lists for sequential steps.
- Use headings to mark off all the main sections and subheadings for subsections. (Remember that no heading ‘Introduction’ is needed between the title and the first paragraph. Remember not to use first-level headings in this assignment; start with the second level.)
- Use special notices as appropriate.
- Make sure you use proper format for all headings, lists, special notices, and graphics.
- Use graphics to illustrate any key actions or objects.
- Provide additional supplementary explanation of the steps as necessary.
- Remember to create a section listing equipment and supplies, if necessary.
- Include strong sections of definition, description, or both, as necessary, using the guidelines provided on content, organization, and format.
- Share the draft with the people of similar aptitude and knowledge for whom the instructions are made

Writing Technical Descriptions

The main steps involved in writing technical descriptions include naming, definition (assigning meaning to objects), description (highlighting certain aspects of the object), and illustration (description using graphic elements rather than words). These four activities are explained as follows:

Naming

This most basic activity, naming, is how we understand the world around us. Without names, we would have to refer to objects, people, or places with sounds and gestures: ‘uhh, that big



thing over there’ or ‘you know, what’s his name, the little fat guy with the blue hair’. This might be acceptable to some extent in a face-to-face communication, but it is impossible in written communication. We describe the world around us by naming what we see. Hence, start with naming the objects and processes that are being described.

Definition

A technical description begins with a definition (formal or extended) of the object or process to be described and a general breakdown of the components that will be detailed. The introductory paragraphs (or pages, in some cases) provide the reader with general information of the content that follows. Usually, the definition is followed by a list of the components and a brief note on the detailed description of each. In the case of the digestive system, for example:

First, the definition

The digestive system is essentially a tube passing through the body from the mouth to the anus. It is responsible for the ingestion and processing of food into useable energy, which is taken up by the body’s cells, and non-useable waste products, which are eliminated.

Then, the list of components

The digestive system consists of the mouth, oesophagus, stomach, small and large intestines, the colon, and the anus.

Finally, an outline of the detailed description that follows

Each of these components is described in terms of its function and cellular makeup in the subsections that follow.

A *definition* fixes an object, concept, or process within some system of knowing. Definitions appear in one of three forms: *formal*, *informal*, and *extended* definition. A formal definition will contain a *term* (that which is to be defined), a *category* to which the term belongs, and a set of *differentia* (a set of words that separate the term from those elements within the category in which the term is located). An informal definition appears in brackets in a sentence to help clarify a concept (for example, one was used in the definition of *term* above). An extended definition is a form of technical description itself and may run to tens, hundreds, or even thousands of pages in length. The formal definition is the most common form and is the one given in dictionaries. As a rule, a definition cannot use the term itself in the category or the differentia. For example, we cannot say that a Calico cat is a cat that is calico in colouration—this is referred to as a circular definition.

If you have ever played ‘twenty questions’ (the game in which the players try to guess the identity of an object in the mind of another player by asking questions to which the answer can only be yes or no), you will have a good grasp of categories. To start a game like this one, a player will ask a question such as ‘Is the object manufactured’ or ‘Is the object natural’. It would be useless to ask ‘Is it a comb’ right away since you only have twenty questions that you can ask. The strategy to playing successfully is to narrow the category to which the object belongs sufficiently so that naming specific objects becomes a possibility.

Asking whether an object is big or small provides no useful information because the terms big and small are relative—one quickly learns to relate the size to something specific—like a Volkswagen or a Canadian dime. For example, a float-plane is an object that is larger than a Volkswagen, but you would still have a difficult time determining the name of the object from that category.

Functional categories are also useful in this case; such as ‘What does it do?’. Questions such as ‘Is it a form of transportation?’ or ‘Is it a tool?’ might help. To guess that the object is a form

of transportation gets us somewhere closer to a correct guess, in the case of the float-plane, but so are cars, trains, and ships. As it is obvious, narrowing the category is critical to winning this game—guess air transport, guess fixed-wing air transport, guess fixed-wing air transport that is able to take off or land on water and you have a working definition of a float-plane.

Description

Description is the process of making an object, idea, or process known to someone who is unfamiliar with it (it is very much like a definition in that respect). A description will use words and illustrations to outline the shape, the material, the purpose or function, and the relationship of one object, idea, or process to other objects, ideas, and/or processes. A description attempts to make the unknown familiar; therefore, it occasionally uses the light of the familiar to illuminate the darkness of the unfamiliar. In this quest, it is common for descriptions to use analogies, metaphors, or similes to get an idea across (for example, the metaphors of light and darkness in the preceding sentence were used to carry the meaning of the process of gaining knowledge). Description also relies upon strategies of organization such as division and classification, comparison and contrast.

Division and classification is the process of breaking down complex systems into more manageable components and then grouping the components together based on some overriding determinant such as spatial relationship, functional or genetic similarity, chronological relationship, or a host of other bases upon which a classification can take place. The result is usually informative or analytical in nature rather than comparative. When the programming takes place for solving an algorithm, the programme is made of subprogrammes which are called within the main programme to get the final output of the algorithm.

Comparison and contrast is familiar to most people who have ever shopped for something that is made by many suppliers, or that comes in a variety of models—like a car or a computer. The compare and contrast method depends on a fixed set of criteria (such as cost, practicality, efficiency, or options available) in order to analyse the choices presented to the user. The criteria are applied to each of the cars or computers, for example, and a comparison of the results usually points to a better car or computer. Compare and contrast analysis is result oriented, and sometimes persuasive, rather than being strictly informative.

Illustrations

It has been said that a picture is worth a thousand words; however, in technical writing, it must be understood that a picture does not *replace* words; rather it *enhances the meaning* of the words. A prudent technical writer uses graphics to his/her advantage to show an overall view of the object or process and to illustrate each of the sub-divisions into which the object or process is divided.

Graphics are very useful as aids to transmit meaning, especially when language is a barrier to understanding, but they are limited to describing something abstract. Consider the following: How would you describe the beautiful maple leaf to someone who has never seen one? Or a hockey stick?

Graphics are ideal for representing things that are complex. However, they do not define themselves; we have to label and describe each part of the graphic based on what we want to convey. Consider this example: Is the definition of a hockey stick different for someone who has never seen one compared to someone who uses one professionally? The answer is yes. The hockey player defines the stick in a much different way because he/she has a different need—the player defines the stick in terms that are more refined: blade width, amount of curve allowed, shaft flexibility, and a host of other regulations imposed by the governing body of whichever

league he/she plays in. The person who has never seen a hockey stick will most likely want to know what it looks like and how it is used.

Process Description

Once the components of the object, idea, or process have been described—and illustrated—there is one more form of description that allows the reader to visualize the complete function: the cycle of operation. This is a functional or relational description and shows how all the parts described work together to produce the desired result. This section takes the form of a narrative and gives the reader an overall view of the object, idea, or process. Process descriptions are written as if the process is taking place right now—and so in present tense. They usually begin and end at the same point; for example, press the start button/stop button, or feed in raw material/extract the finished product. Hence, ensure that a technical description follows this basic three-step form:

- A definition, followed by a list of the major components to be discussed, and an illustration.
- A section for each of the major components listed, which defines the components in terms of their function and then describes the components in terms of their material, dimensions, texture, relationship to other components, the method of attachment (and any other descriptors necessary), and lists all sub-components (which will also follow the basic 'define, describe, and illustrate' format)
- A description of one complete cycle of operation (a process description).

The following examples of object and process descriptions will help you understand how the guidelines given in this chapter can be used to write good technical descriptions.

Object Description: Dual-option Burner System

The dual option burner system can be operated either with or without a flow spoiler for optimum operation under different analytical conditions. Some versions of the dual option burner system also allow use of a removable impact bead. Consult the Spectrometer instruction manual for details on the burner system provided. A diagram of the dual-option burner system is shown in Figure 16.1.

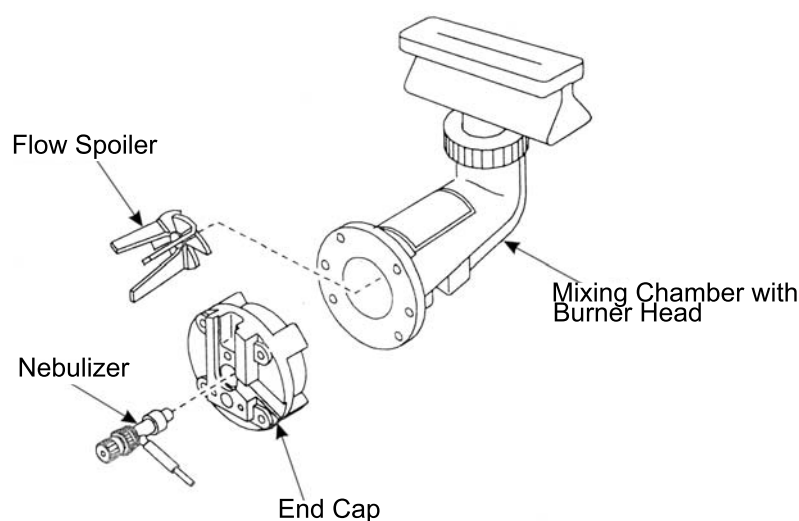


FIGURE 16.1 Diagram of dual-option burner system

The premix burner chamber is molded from plastic and treated to insure proper drainage. The burner system can be operated either with or without a flow spoiler. The flow spoiler is molded of polypropylene and is held in position by three support arms which press-fit to the walls of the mixing chamber.

To facilitate removal, the end cap is held in place by four large knurled-head screws. A large O-ring, held captive by a groove in the end cap, is used to seal the end cap to the mixing chamber. For extended operation with organic solvents, a Corkprene O-ring is also available.

For routine operation it is recommended that the burner system be operated with a flow spoiler. The flow spoiler helps to remove large droplets from the nebulizer aerosol and thus minimizes chemical interferences. Removing the flow spoiler provides somewhat improved sensitivity with generally little or no degradation in precision. However, it is recommended that operation without a flow spoiler be restricted to the analysis of relatively "clean" samples, where the risk of chemical interferences is low.

Burner heads

There are four burner heads available for use with the dual-option burner system. They are all made of solid titanium which is corrosion resistant and free of most of the elements commonly determined by atomic absorption.

The 10-cm burner head is designed to be used with the air-acetylene flame. Because of its long burner path length, it provides the best sensitivity for air-acetylene elements.

The 5-cm nitrous oxide burner head is required for nitrous oxide-acetylene operation. On many spectrometer models, it can also be used with air-acetylene or air-hydrogen. It can be rotated 90° to provide reduced sensitivity.

The three-slot burner head is designed to be used when analyzing samples with high concentrations of dissolved solids. The three-slot burner head is not compatible with all gas control systems. Refer to your spectrometer operating manual or hardware guide for information about possible use of the three-slot burner head.

A 5-cm air-acetylene burner head is available for applications in which reduced sensitivity is required. On many spectrometer models, it can be rotated 90° to provide reduced sensitivity, and it has a wide slot to prevent clogging. This burner head can be used only for air-acetylene operation.

Nebulizers

To meet varying analytical requirements, several different types of adjustable nebulizers are available. Some types are constructed from inert plastic to provide maximum chemical resistance when highly acidic or corrosive solutions are being analyzed. The standard nebulizer, which provides best performance with respect to minimizing chemical interferences, is recommended for general-purpose applications. A High-Sensitivity Nebulizer is available for applications that require maximum sensitivity and the lowest flame detection limits. The High-Sensitivity Nebulizer utilizes an integral ceramic impact bead to enhance atomization efficiency.

All Perkin-Elmer nebulizers can be easily disassembled for cleaning, and individual parts are available if replacement is necessary.

The Standard Conditions section of this manual provides typical characteristic concentration values for the standard nebulizer.

Process Description: Natural Waters**Scope**

This method describes the determination of calcium, copper, lithium, magnesium, manganese, potassium, sodium, strontium, and zinc in natural waters, and may be applicable to other elements.

Reagents

Lanthanum solution, 5% (w/v). Prepare as described under the Standard Conditions for La.
Hydrochloric acid, HCl, concentrated.

Standard solutions

Prepare all standard solutions except calcium and magnesium by suitable dilutions of the stock solutions described under the Standard Conditions for each element. For calcium and magnesium, dilute the stock solutions with the 5% (w/v) La solution and HCl to give dilute standards which contain 0.25% (w/v) La and 5% (v/v) HCl.

Sample preparation and analysis

Filter each sample through a 0.45 micron micropore membrane filter, if necessary, to avoid clogging of the burner capillary. Aspirate each sample directly, except for calcium and magnesium. For calcium and magnesium, dilute with 5% (w/v) La solution and HCl to give a final solution concentration of 0.25% (w/v) La and 5% (v/v) HCl. Determine the concentration of the element of interest by using the Routine Procedure as described in the General Information section. Calcium and magnesium results should be corrected by using a reagent blank.

Calculations

Read the concentration of the element of interest directly against the appropriate standards. Where a dilution is required, the concentration of the element of interest is calculated as follows:

$$\text{Element (ug/mL)} = \frac{(\text{ug/mL in diluted solution})(\text{volume of diluted solution in mL})}{(\text{volume of aliquot taken for dilution in mL})}$$



Please refer to the companion CD for more samples of object and process descriptions.

SUMMARY

Research papers may be classified under the advanced forms of technical writing, generally taken up by academicians and researchers. This formal form of writing possess certain specific characteristics and include some essential components in its structure. It is also necessary to follow certain steps in writing them. Knowledge of all these features will enable one to write this important document with effectiveness in order to disseminate research-related information to their readers. The importance of technical descriptions is

also growing fast with the development of technologically advanced products. A technical description is required to understand the details of an object or a process, and to be able to identify the problem if something goes wrong in the functioning. Hence, one needs to keep in mind organization, content, structure, classification, and level of detailing in order to provide a clear and effortless description that is easy for the reader to grasp.

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