ALBUKHARY INTERNATIONAL UNIVERSITY

STUDENT HANDBOOK

POSTGRADUATE DEGREE PROGRAMME BY RESEARCH MODE

CHAPTER 1
Facilitating the Transition from Undergraduate to Postgraduate Studies

1.1 INTRODUCTION

As the learner moves through the educational system, each stage marks a rite of passage which carries with it new challenges that generate new needs and require adaptation to a different way of life. The extent to which these needs are satisfied and the extent to which the individual is able to adjust to the new environment directly influences the individual's motivation and, ultimately, ability to satisfy the demands of the institution.

Entering Higher Education can be an even greater challenge, since it coincides with and marks the acceptance of the individual into the community as a legally recognised adult. Often, this is also the first occasion that students are away from their parents and friends and this requires them to adapt to a new life: the new campus, the new programme, new teachers, new classmates, new food, new accommodation, and new friends.

Becoming a postgraduate in the institution from which they gained their bachelors' degrees can be problematic but in subtle ways. In particular, the attitudes of the "same" academic staff to students change. For example, they no longer monitor in the overt way they did with undergraduates and progressively shift their teaching style away from instructing to facilitating individual learning. Going to a different institution, especially in another country, can be even more challenging or traumatic.

The beginning of each stage is, in contrast, usually less clearly marked. Although there is likely to be a Prospectus issued by the institution and often some kind of formal or informal induction, the responsibility for easing the transition falls mainly on the shoulders of teaching staff (teachers, lecturers, and supervisors).

1.2 HIGHER EDUCATION AWARDS

In most tertiary institutions, normally there are four kinds of awards:
Bachelor, Postgraduate Certificate/Diploma, Master and Ph.D.

These awards usually have research components that involve the student writing an extended text: such an exercise usually requires supervision by a faculty member, a supervisory committee or a faculty member who works with a colleague from industry.

These extended texts are dependant for their characteristics (such as length, scope of research, style of writing) on the kind of awards conferred and the mode of study (coursework, coursework and research or purely research).

A Bachelor Degree normally prepares students for entry into general employment or postgraduate programmes. It is awarded to individuals who:

a) Demonstrate understanding of the fundamental principles and practices in a field of study that they have pursued in their tertiary institution;

b) Translate this understanding into acquiring the knowledge and skills that are relevant for them in their field of employment or further study;
c) Apply this knowledge and skills effectively and efficiently in the workplace or educational setting;
d) Use the relevant soft skills (such as communicating effectively, working individually and in teams and being independent and creative) competently; and
e) Demonstrate independent study skills which will lead them to a high degree of autonomy.

There are two distinct types of postgraduate certificates/diplomas. The first is fundamentally academic in its orientation and follows on from the bachelors degree to prepare for further study at masters level. The second has a professional orientation, is likely to occur after the masters degree and is a prerequisite for membership of a professional body.

A Master's Degree allows an individual to develop and enhance the knowledge, skills and abilities obtained at the bachelor level. The degree is conferred on individuals who:

a) Demonstrate that they have obtained knowledge, understanding, skills and capabilities in a field of study that is superior to that which has been obtained in a bachelor's program;
b) Show that they have acquired a higher level of study skills that will allow them to continually progress on their own with greater autonomy; and
c) Exhibit greater ability in their chosen field of research and development.

A Doctoral Degree aims to build on the knowledge, skills and abilities that an individual has obtained at Master's level. It is normally awarded to individuals who, in their thesis or dissertation,

a) Demonstrate in-depth understanding of a field or discipline;
b) Exhibit mastery of knowledge and skills in their field of study;
c) Show that they have expertise in research and are able to conduct research independently;
d) Make an original and significant contribution in their field of study;
e) Use academic or scholarly discourse capabilities to communicate their research findings to peers/people in their field;
f) Demonstrate the use of critical analysis, evaluation and synthesis skills.

1.3   DEFINITION OF POSTGRADUATE STUDY
The defining characteristic of a research-based program of studies is that it must include the creation of a significant piece of research by the student during candidacy which leads to the award of a Higher Degree by the institution.

Research is defined by academic institutions as original investigation undertaken in order to gain knowledge and understanding and, while gaining knowledge might be narrowly seen as amassing facts, understanding necessarily involves explanation: finding out why the phenomenon is as it is.

The research student is even more challenged by the change in status and is required to become much more self-sufficient and self-motivated.

1.4 ASSISTING THE TRANSITION PROCESS

The student moving from undergraduate to postgraduate studies or within postgraduate studies to a research degree programme is faced not only by the need to acquire or enhance appropriate knowledge and skills but also to modify attitudes to the new situation(s) he faces.

Responding positively and successfully to these challenges requires a high level of sustained motivation which cannot be achieved unless the student's needs are satisfied or, at the very least, reduced to the point where they no longer constitute a de-motivating factor.

Those who teach and/or supervise postgraduate students must, therefore, be aware of situations – including their own expectations with the student – which can constitute a threat and set about attempting to remedy or neutralise them (see Appendix A on this).

Demotivating factors can occur at all of the five levels discussed below and, equally, remedial action can be taken to reduce or even cancel these effects.

1.5 MOTIVATION

Motivation is a drive that compels an individual to act in a way which is directed towards some goal.

It may be intrinsic, deriving from personal interests, desires, and internal needs. It can be seen in the engagement of an individual in an activity for its own sake rather than for any obvious external incentive e.g. a hobby.

It may be extrinsic, deriving from external factors such as rewards or punishments. It can be seen when an individual engages in an activity because of obvious external incentives e.g. working for money rather than enjoyment and personal fulfilment. Motivation plays a crucial role in student learning.

In education it is accepted that high intrinsic motivation is associated with high achievement and enjoyment but also that extrinsic motivation – feeling the need to score good marks or gain a higher degree classification - also has a positive effect.

1.6 NEEDS

A general model of motivation suggests that human beings share a common set of needs whose satisfaction provides the conditions for positive motivation and that the individual advances to the next level of needs only after the lower level need has been at least minimally satisfied.

The needs can be subdivided into two type: a) primitive, basic "lacks" (physical and social) the satisfaction of which can facilitate motivation but are not, in themselves, a guarantee of it, and b) more sophisticated "growth" needs

(aesthetic and developmental) which, even in the face of continuing lacks, do so.

The first set consists of four needs:

i. Physiological
Physiological needs relate to the needs of the living organism for food, water, sleep, shelter etc. which ensure its continued existence. If these basic needs are not fulfilled, thoughts and behaviours and can be disturbed.

ii. Safety
Safety needs include both; protection against physical or psychological attack and the security which comes from predictability, order, the frequent occurrence of the familiar and the rare occurrence of the unfamiliar.

iii. Social, and
Social needs relate to the desire to be accepted and loved: to have a sense of "belonging". This involves the retention and strengthening of the primary relationships of family, kinship and friendship and the building and preservation of supportive or at least non-threatening secondary relationships: work etc.

iv. esteem
Esteem refers to self-respect. It also includes the desired to be respected and also to respect others. To gain recognition individuals engage in activities that give them a sense of value and of contribution. Low selfesteem can be very corrosive of the individual personality and lead to deep demotivation.

The second set consists of a single, final need which is concerned with "being" and developing rather than merely existing. Striving to realize one's own maximum potential and possibilities is the master motive which can override even unsatisfied deficiency needs. What counts is not the context of the work but its content. When the work itself is seen as providing great satisfaction – extending the potential of the individual – people will accept appalling conditions to do the job. Examples can be readily seen in the commitment of paramedics at the scene of an accident or the hours of painful physical exercise the dedicated dancer is willing to endure in order to create a perfect performance.

1.7   PHYSIOLOGICAL
Student motivation is likely to be reduced by such physical matters as personal ill health, inadequate space for teaching and learning, rooms which are dirty, poorly maintained, and inadequately lit, at wrong level of temperature and humidity etc.

1.8   SAFETY
While the danger of physical attack is likely to be small in a university, that of disorganisation and uncertainty is not. Some examples include:
- Poorly planned and structured input delivered in a way which is not conducive to learning is likely to reduce motivation (see Appendix A on the relationship of teacher and learner styles);

- The study load is heavier in university than in secondary school and the opportunities for non-academic activities are far greater. This implies that students must be focused, disciplined and develop good time management techniques if they are to make the most out of their time at university. A clear jointly agreed timetable with realistic milestones built into it is therefore a necessity.
- The student also needs to understand the internal and external forces which constitute potential obstacles to the work and ask:
    1. What are my strengths and how can I use each of them?
    2. What are my potential weaknesses which can be reduced or removed?
    3. What opportunities can I perceive and how can I exploit them?
    4. What threats do I face and how can I defend against or neutralise them?

The pattern of SWOTs the student discovers can form part of the basis for facilitating the research by acting as inputs to the creative generation of possible learning strategies.

The attitude of the supervisor to the student can also constitute a powerful positive or negative motivational force. The accepting and non judgemental supervisor who praises appropriate work rather than criticise the inappropriate goes far to providing a level of security which facilitates learning.

1.9 SOCIAL

The student needs to feel that (s)he is a member of the academic community rather than an outsider. This assumes the fostering of positive relationships between supervisors and students and between students and students: nurturing friendships, creating appropriate degrees of closeness etc.

- The supervisor can do much by adopting open styles of teaching and interaction which entail the abandonment of teacher dominated "topdown" processes and their replacement by a "bottom-up: top-down" iterative style which, rather than assuming a "solution", seeks to arrive at a "provisional truth" shared by (most of) the participants about the problem and possible solutions to it.
- Relationships between students which are probably most conducive to motivation are those which are founded on mutual trust and co-operation rather than suspicion and competition: peer supervisory and joint research activities provide opportunities for this.

1.10 ESTEEM

A situation in which an individual possesses self-esteem, receives respect from others, and, reciprocally, shows respect to them, provides students with opportunities for confidence building and pride in their achievements and is likely to be highly motivating.

- Indicators of such a situation will include:
- Self-esteem: individuals developing new knowledge on the basis of their existing background and specific knowledge and being able to share this with others in a competent way.
- Respect for and from others: a learning environment in which students are positive and non-judgmental and empathetic and good listeners.

1.12 SELF-ACTUALIZATION

The four basic needs are all concerned with "existing" rather than "being" and, even if they are satisfied and the *context* in which a person is working is threat- and need-free, an individual may still lack motivation because the *content* of the work is not in itself satisfying.

Individuals need to feel that they are growing, developing towards realising their own maximum potential and becoming truly themselves. It must be the case for the vast majority of the academic community – staff and students alike - that each individual sees such self-actualisation as the fundamental purpose of the activity and one which can be so powerful as to neutralise unsatisfied needs at lower levels.

Motivation in such a context is likely to be intrinsic rather than extrinsic: rewards in the form of promotions, titles, fame are, as it were, byproducts rather than the goal.

In knowledge-sharing communities and organizations, such as universities, the need to contribute to a common good is essential.

1.13 TEACHING AND LEARNING STYLES

The major parameters in learning are:
> a) the content (what has to be learned),
> b) the context (where and when the learning is to take place)
> c) the participants (who are involved).

Of the three, the participants are the crucial variable in terms of the success of the process. Each has particular long-term and short-term motives and needs (the why of the equation) and, just as the teacher has particular preferred strategies for teaching, so has the learner for learning; both answers to the question of how? Congruence between the teacher's and the learner's strategies is an important, perhaps a criteria, requirement for the successful outcome of an educational program.

1.14 LEARNING: CONTENT, MODE AND STYLE

Learning can be divided into what is learned and how it is learned – content and mode – and, within the alternative ways of learning, preferred learning styles.

1.14.1 Learning: Content

Learning the content consists of the acquisition of knowledge, facts and skills; factual and procedural knowledge; knowing that and knowing how.

But knowledge is not neutral: it brings with it explicit (and implicit) attitudes and values which also form part of the acquisition process and this attitudinal knowledge affects not only the way in which the facts and skills are acquired but also how the individual interprets them and puts what is learned into practice.

The factual knowledge for the learner will be the body intellectual knowledge within the discipline and the procedural or practical knowledge, the skills and techniques required for its acquisition and application which, in the case of the postgraduate student, will not only include literacy, computer literacy, and numeracy but also a range of communication skills such as active participation in seminars, presenting at conferences etc.

1.14.2 Learning: Modes
Common sense tells us that there are default modes of learning for different kinds of content: the way something is learned depends on what it is.

Facts (e.g. dates and names) need to be memorized.

Concepts (e.g. intellectual models of phenomena) have to be understood.

Activities (e.g. swimming) demand physical activity and constant practice to keep at peak level.

These defaults apply to specific aspects of a discipline rather than to a particular discipline as a whole. For example, in chemistry, the periodic table needs to be memorised but the influence of valency on chemical reactions cannot be memorised. It has to be understood as a system. Equally, while it is important to know what is involved in an experiment and why, the actual conduct of the experiment requires the application of skilled laboratory techniques which can only be acquired through use: demonstration and guided trial and error.

In higher education, there seems to be little call for memorising but far more emphasis on understanding and the development of learning skills and research methods and finding ways of applying the acquired knowledge.

1.14.3 Learning: Styles
Even though there are default modes for the learning of particular content, students adopt their own personal learning styles. These can be defined in terms of where they position themselves on the following five scales:
a) Sensing-intuitive: preferring to perceive information through the senses (sights, sounds, physical sensations) versus intuition (memories, ideas, insights);
b) Visual-verbal: perceiving sensory information most effectively through the visual channel (pictures, diagrams, graphs, demonstrations) versus the verbal (sounds, written and spoken words and formulae);
c) Inductive-deductive: preferring information to be organized inductively (facts and observations presented first from which underlying principles are inferred) versus deductively (the principles

are given first and from these consequences and applications are deduced);

d) Active-reflective: processing information actively (through engagement in physical activity or discussion) versus reflectively (through introspection);

e) Sequential-global: progressing towards understanding sequentially (in a logical progression of small incremental steps) versus globally (in large jumps, holistically).

The combinations of choices generate a total of 32 potential learning styles and, naturally, a student's preference on a given scale (e.g. for inductive or deductive presentation) may be strong, moderate or weak, change over time, and vary depending on the subject or the setting.

Nonetheless, seven relatively distinct learner types do emerge

- Visual (spatial): a preference for using pictures, images, and spatial understanding.
- Aural (auditory-musical): a preference for using sound and music.
- Verbal (linguistic): a preference for using words, both in speech and writing. Physical (kinesthetic): a preference for using his/her body, hands and sense of touch.
- Logical (mathematical): a preference for using logic, reasoning and systems.
- Social (interpersonal): a preference for learning in groups or with other people.
- Solitary (intrapersonal): a preference for working alone and using self-study.

There are implications here for both the learner and the teacher. Both need to know what kind of learner/teacher (s) he is, and the teacher needs to adopt a range of styles and techniques which are fit or at least do not clash with the preferred styles of the learners.

Since preferred teaching styles presumably derive from the teacher's own preferred learning style(s) he may well assume it to be the most appropriate for particular content and, as a result, attempt to impose a preconceived and not necessarily appropriate learning style on the students.

1.15 CONCLUSION

What seems to be distinct between undergraduate and postgraduate studies is that supervision usually replaces the traditional classroom interaction that an undergraduate is used to. The interactions between the supervisor and the supervisee is crucial as it forms the apex of teaching and learning in postgraduate education.

CHAPTER 2
GOOD PRACTICES IN SUPERVISION

2.1 INTRODUCTION

Supervisors have a job which begins even before they meet the supervisees and will not end when the supervisees receive their doctorates. Given the many hours spent in consultation, working together towards a common goal, the role may turn into that of a co-writer and/or a friend and advisor.

However, for most supervisors, supervision is a job entrusted to them by the institution they work in and it is essential that they understand their role in a professional way.

2.2 RIGHTS AND RESPONSIBILITIES

The supervisor and the supervisee are interconnected in a complex, contractual system of rights and responsibilities which highlight the centrality of accountability and Quality Assurance.

2.2.1 Supervisor

The supervisor has the right to expect the institution to ensure that its policies and practices do not put the quality of supervision at risk. For example, supervisors should not be given too large a volume and range of responsibilities or be forced to cope with excessive numbers of supervisees or supervise outside their areas of expertise.

The supervisor also has the right to expect the supervisees to fulfil their side of "the contract". The implications of this are spelt out in Appendix A and B.

The supervisors are responsible to the institution (e.g. the university) for ensuring that the supervision they provide satisfies the criteria recorded in the university's Quality Assurance Guidelines.

They are also responsible for ensuring that those they supervise perform to the best of their ability, and for involving them in activities which help them to enhance the knowledge and skills they possess. Chapter 6 contains a comprehensive list of suggested activities.

2.2.2 Supervisee

The supervisee has the right to expect the supervisor to provide quality supervision and for the institution to facilitate this by creating and implementing appropriate policies.

The supervisees are responsible to the supervisor for the quality of the research they are conducting and to the institution (e.g. the university) to abide by the regulations it has set for the proper conduct of research.

The supervisees also have a personal responsibility for their own learning by for example:
a) Developing research skills and techniques;

b) Gaining a deeper awareness of the social and professional implications of the research;
c) Enhancing appropriate research management practices;
d) Becoming increasingly self-disciplined, motivated, thorough, independent and self-reliant;
e) Improving communication and information technology skills;
f) Learning to use cooperative networks;
g) Developing project management, time management and self-management skills.

2.3 ROLES AND RESPONSIBILITIES

2.3.1 Roles

Supervisors and supervisees relate to each other in ways that are unequal and constantly changing as the project progresses. Typically, this development is marked by four overlapping stages:
1) the supervisee is dependent on the supervisor;
2) the supervisee becomes increasingly independent as the supervisor takes on the role of coach;
3) the supervisee becomes independent supported by the mentoring of the supervisor;
4) the supervisor and supervisee become interdependent in a peer-peer relationship.

2.3.2 General Roles and Responsibilities
1) Giving guidance and advice. Supervision is teaching – do not expect the student to know everything. Do not say things like – you are doing a MA/PhD, you are supposed to know this. (Use Appendix A to have a clear understanding of what you and your student expect from each other). Be transparent and communicate with your student to understand their concerns. Treat your student as a future colleague/emerging scholar.
2) Monitoring the progress of the research – this includes submitting progress reports based on institutional requirements. Supervisors can set monthly/semester goals to ensure that these progress reports are matched with goals that have been agreed upon. Avoid saying: you are supposed to have done this – make your expectations clear.
3) Initiating regular contact - meet your students at least once in a month. You may need to meet them more often during the initial period of candidature.
4) Being aware of the supervisee's developmental needs – this includes the supervisees need to be provided with academic and emotional support (see Chapter One on this) and also the need to provide guidance in the initial stages of the research.
5) Giving both oral and written feedback on the supervisee's work. Feedback should encourage and not demotivate the student.
6) Ensuring ethical and professional conduct. Treat students with respect. They are mature students.
7) Advising on workplace safety, equal opportunities, and career development.

8) Ensuring that the supervisee is fulfilling his/her part of the supervisory contract by meeting datelines and meeting the supervisor regularly (see Appendix B for sample of supervisory contract). 20 A Handbook for Postgraduate Supervision

9) Keeping a written record of progress.

10) Recommending taught courses.

11) Determining when to submit a thesis for examination. If articles have been published in refereed journals, it is a clear indication that the thesis has met standards accepted by the discipline.

12) Dealing with serious personal or institutional problems. Be there for the students. Get help if you are unable to assist.

13) Structuring meetings. Start supervisory meetings by praising your students for work that has been completed. Following this, provide well directed feedback so that they will know what to do next. Finally, ask your student to list down all that has to be done before the next meeting.

14) Reporting meetings. Ask your students to write out the main points of supervisory meetings and email the minutes to you.

15) Preparing for supervisory meetings. Read drafts prior to meetings. Check the content. Refer to the references that have been quoted and check if the student has understood correctly. Provide additional references if necessary. If students have problems with academic writing, provide guidance or ask them to seek assistance. Encourage reflection when you provide feedback.

16) Encouraging the formation of peer support groups (see Chapter 6 for details).

17) Understanding cultural norms. Some students may not be comfortable meeting supervisors alone (e.g. female students meeting male supervisors). If this is the case, arrange for joint supervision or meet in a common room.

18) Supervise until completion. When you take on a student, it is the responsibility of the supervisor to ensure that the student is supervised until completion. If you are planning to go on sabbatical leave, discuss this with the student before taking him/her as your student. Inform students if you are going on long leave and make alternative arrangements for regular supervision.

Producing an MSc or a PhD graduate is an on-going process requiring frequent meetings and guidance. The supervisor's role changes during the course of the programme. It is a kind of apprenticeship. The ultimate aim is to produce an independent researcher.

2.4   SUPERVISOR – SUPERVISEE EXPECTATIONS

There is normally a need to resolve rights and responsibility with regard to the following issues:
   a) Identifying/ finalizing the topic of research.
   b) Describing the research issues.
   c) Deciding on the theoretical framework.
   d) Helping or facilitating the preparation of the research proposal.

e) Helping with oral presentations.
f) Familiarising students with the appropriate services and facilities of the department and the university.
g) Obtaining reading materials.
h) Helping in reading, understanding and critically evaluating the reading material.
i) Facilitating funding.
j) Helping to find part-time employment if necessary.
k) Helping with networking.
l) Encouraging conferencing and publishing.
m) Developing a schedule of research/study.
n) Ensuring that the candidate adheres to the schedule.
o) Assisting in the writing of the thesis.
p) Deciding on the standard or quality of the thesis.
q) Helping to prepare for the viva voce.
r) Providing emotional, social and other kinds of non-academic support.

Supervisor's expectations of students:
a) To have a clear idea of what they would like to research on.
b) To be self-motivated.
c) To work consistently.
d) To keep to appointments for meetings.
e) To take responsibility for keeping notes of meetings.
f) To work on the feedback given to them.
g) To complete on time.
h) To take ultimate responsibility for their own work.
i) To be independent
j) To be proficient in the language.
k) To do their own or outsource editing and proof-reading

Students' expectations of supervisors:
a) To read drafts before supervisory meetings.
b) To be readily available when there is a need.
c) To be collegial, open-minded and supportive.
d) To provide constructive feedback.
e) To have a clear understanding of the research area.
f) To facilitate supervision meetings that enable exchange of ideas.
g) To show keen interest in the research that is being conducted.
h) To be sufficiently involved in their success to help them get jobs.
i) To be punctual for supervisory meetings.

2.5 SUPERVISION EXPECTATION RATING SCALE

A tool that has been developed to clarify and resolve the expectations of supervisors and students is the supervision expectation rating scale (Appendix A). Supervisors can use this tool at the onset of supervision to ensure expectations are clear and agreed upon. It is necessary to review these expectations from time to time and accommodate changes in expectations, if any, based on a structured timeframe. Even if there are no changes it is useful to refresh the minds of both parties with regard to the expectations that have been initially agreed.

2.6 THE IDEAL SUPERVISOR

Research on views of students on what they consider to be the idea supervisor indicate that the following are the most important qualities of the ideal supervisor:

- Support
- Availability
- Interest and enthusiasm
- Knowledge and expertise in the field
- Interest in the student's career
- Good communication
- Constructive feedback
- Direction and structure
- Approachability and rapport
- Experience and interest in supervision
- Encouraging
- Reliable and punctual at meetings
- Responds to student as an adult
- Advocating a peer-to-peer model of supervision

Among the most substantial qualities which students do not like in a supervisor are:

- Too busy to be effective
- Poor feedback
- Lack of commitment and interest
- Tensions/conflict with the supervisory team
- Poor communication skills
- Conflicting/unrealistic expectations
- Selfishness and disrespectfulness
- Supervisor not up to date in the field
- Lack of experience as a supervisor
- Personality clashes
- Advocating a master-slave relationship

CHAPTER 3
ASSISTING STUDENTS TO WRITE

3.1 THE CHARACTERISTICS OF SKILL WRITERS

The literature on writing emphasizes the need to understand writing as a process. The following are important insights gleaned from literature reporting the characteristics of skilled writers. Skilled writers:
- Plan elaborately before they write and discuss their plans before writing. Most use visuals to structure an argument.
- Consider their audience when they write.
- Write in chunks, that is write in sections.
- Do free writing (a strategy to overcome fear of writing by writing quickly without considering grammar, spelling, etc. The focus is on generating content).
- View writing as a thinking process. Writing helps to clarify their thinking.
- Are aware of writer's block (the inability to write at certain times).
- Understand that there is a revision aspect to drafts, that is drafts can be improved with critical feedback.
- View revision as a process of discovery, that is, they learn about new links in their ideas and how to reorganise their argument.
- Revise the whole text rather than keep revising at paragraphs levels.
- Value and appreciate critical feedback. They understand that critical feedback helps them to improve their writing.
- Are proactive in solving writing problems. As an example, when they read, they keep a record of interesting phrases which they can use when they write.
- Consider writing as a habit, that is, skilled writers write at regular times. It has been suggested that postgraduates are encouraged to write between 500-1000 words per day on a regular basis. This writing could be about any aspect of their research journey including reflections, frustrations, etc. The idea is to write at a regular time so that writing becomes habitual. Once this habit is formed, it becomes easier to focus on writing sections of the thesis.
- Do not find time to write, but ALLOCATE time to write.

3.2 WRITING PROCESS
Two main components of the writing process are planning and revising. At the postgraduate level, these two processes need to be understood to ensure that supervisors can provide effective guidance.

3.2.1 Planning
The supervisor plays an important role in helping supervisees to plan their writing. A very common complaint from supervisors is that supervisees do not plan their writing and thus their writing often seems disjointed. Supervisees are also vague in what they write. As an example, it is not normal for supervisees to produce written work that is more descriptive than argumentative or one that does not include any critical appraisal. To overcome this problem, supervisors may ask supervisees to do an outline of what they intend to write. Supervisees may discuss this outline with their supervisors prior to writing. In the discussion, the supervisor can

pose questions centred around the headings and sub-headings, hence, guiding supervisees to structure their writing into an argument.

One useful tool to help with the planning is the outline function in Microsoft WORD. (Go to View – outline). The outline function allows writers to create headings and sub-headings. Once this is done, it would be easy to ensure that there is a flow (cohesion) in the writing. The outline function can be used to move paragraphs and sections so that arguments and supporting details can be easily prioritised. This function also allows the supervisor and supervisee to discuss and see the "bigger picture" of sections and chapters. These functions also allows the writer to link sections by using signals and signposts into a coherent argument. Examples of signals/signposts are: *a second argument is that...*, *the discussion in section 3 indicates that* ...A useful source is http://www.phrasebank.manchester.ac.uk/.

Another tool that can be used in the planning is a mind-map. The mind map is a graphic representation of how ideas are developed and connected in a piece of writing. The usefulness of this sort of graphic representation is that both the supervisor and the supervisees can follow the line of arguments and also make connections between sections and sub-sections. The forms of mind-map can be done using a power point presentation. The supervisor can ask the supervisee to prepare a 2 – 3 slide show outlining their chapter. This provides an overview of the planning and thus aids in structuring an argument.

3.2.2   Revision
The second important component of the writing process is revision. Revision does not mean merely proofreading/editing. It involves changes in ideas and organization of content. While proofreading/editing is concerned with surface level corrections such as fixing commas, spelling, punctuation, and grammar, revision literally means to "see again", to look at something from a fresh, critical perspective. Although in the course of revising the supervisor will be proofreading and editing, the primary goal of revision is to rethink what has been written. Revising is a process of discovery where arguments are reconsidered, evidence reviewed, purpose refined, and presentation reorganised.

The processes of revision:
a)   The following are some questions that may be used to guide a supervisee in the revision process to ensure that it is thorough and effective:
- Does the argument and purpose remain clear throughout the thesis?
- Is it considerate to the reader? Is enough information provided to the reader to follow an argument?
- Does the writer have a sense of the current views of the topic so that the argument remains within the context?
- Does the introduction of the thesis clearly introduces the ideas and explains its significance? Does it attract the reader?

- Does the body of the thesis cover the major points?
- Are the transitions/connections from paragraph to paragraph clear?
- Are the major points supported by sufficient amount of evidence and analysis?
- Does the conclusion follow logically from the introduction and body of the thesis?
- Are figures, diagrams, formulae, charts, and tables located close to the text to which they refer?'

b) Repetition is sometimes needed to strengthen an argument. A supervisee will need to start working early as the process of revision takes time. (S)he has to go through several drafts before a thesis is ready for submission. It should be noted that in some universities supervisors limit the number of times they read each draft/chapter. Supervisors can encourage supervisees to get peer feedback on drafts before they submit to the supervisors.

c) Some other steps that should be considered in the later stages of the revision process:
- Balance - examining the balance within the chapter:
    i. Are some sections too detailed?
    ii. Is a trivial point given more attention than an important one?
    iii. Are details being given too early before the larger picture?

- Support:
    i. Does the thesis answer the research question?
    ii. Is the audience able to follow the thread of thought?
    iii. Have the claims been supported in the thesis?
    iv. Are there any stronger arguments provided to defend the position taken?
    v. Have vivid examples been provided to support the points?
    vi. Are the examples reliable, representative, and convincing?
    vii. Have all the opposing viewpoints been considered?
    viii. Are contradictions acknowledged?

- Transition signals:
    i. Have transitional signals been used effectively to make ideas move smoothly from one paragraph to the next or from one sentence to the next within a paragraph? Transitional signals could include signals and signposts such as, *in the next section, first I will discuss, then I will argue that, following these discussions, etc.*

- Paragraph Length
    i. Are some paragraphs too long or too short?

        ii.   Do some content need to be elaborated or some deleted?

- Paragraph development:
  - i. Do the topic sentences (main points) link to an argument?
  - ii. Do the topic sentences establish a link with the content of the previous paragraph?
  - iii. Do the topic sentences provide enough information to help the reader understand?

- Shifting order:
  - i. Could some things be shifted or moved around in order to enable the reader to follow the argument better so that the thesis reads better?

- Accuracy:
  - i. Have all the facts been accurately presented?
  - ii. Are there any misleading statements?
  - iii. Are there any statements with gross generalizations?
  - iv. Is sufficient detail provided to maintain readers' interest?
  - v. Is the citation given in the thesis cited appropriately?

- Vagueness:
  - i. Have all unnecessary words been deleted?

- Concluding thoughts:
  - i. Is the last paragraph tied in nicely with the rest of the chapter?
  - ii. Does the chapter end on an inspiring note or create a lasting impression or does it end abruptly?

- Use of published material/sources:
  - i. Have original thoughts been acknowledged?
  - ii. Are direct quotations used appropriately and effectively?
  - iii. Have proper citations been provided to avoid plagiarism?

d) Usually revisions are done when the chapter is completed to enable the writer to see the thesis as a whole.

e) Experts offer the following tips when revising:
- Asking questions and answering them truthfully.
- Reading the paper out aloud, sentence by sentence.
- Working from a hardcopy.
- Producing more to be able to cut more.
- Imagining yourself as a reader for the first time.
- Getting someone else to read the thesis.

Supervisors need to emphasise that revision is a key component of any written task. Revisions should be looked upon as opportunities to clarify thoughts. Producing a finished draft, entails writing numerous drafts and it is through this process that learning takes place. It should be noted that revisions are usually done after feedback.

3.3   STAGES IN WRITING
There are four steps which serve as a guide to the writing process:

3.3.1   Making an outline
- List the main points that will be considered for each chapter.
- The outline can be thought of in terms of names, headings, graphs, charts, keywords, etc. Usually keywords become the headings and subheadings of the thesis. At this stage, the supervisee should be able to come up with an initial draft of the Table of Contents.
- Supervisees may be asked to give their theses a rest for a day or two and return to them with fresh perspectives. They can be asked to hand over the outline they have prepared and seek the supervisor's feedback to see if they are on the right track. The completion of the outline indicates an important milestone in thesis writing.
- Supervisees may well be advised to make the outline rather detailed, so that it ends up with a list of points that corresponds to subsections or even to the paragraphs of the thesis. At this stage, the logic of the presentation can be considered; however, this may change over time.

3.3.2   Preparing to write the thesis
- The thesis may be organised using electronic folders. Folders and subfolders may be made for each chapter and additional folders may also be made for references, appendices and preliminary materials which include the abstract. Supervisees should familiarise themselves with Office Application software (such as WORD and LaTEX) and their features (such as formatting, spell check and equation editor). A specialised software such as ENDNOTE is extremely useful. (See Chapter 8 for a list of software)
- Backup copies must be made since errors, computer crashes, and virus invasions do occur. It is wise to even save a copy of the work in two different locations, such as a thumb drive and an external drive. Alternatively, the supervisor may advise the supervisees to email work in progress to the supervisees' own email accounts. Regular updates are strongly recommended.
- Physical folders may also be used to organise the thesis. Notes, scraps, raw data, letters, and other artefacts of the writing process may be stored here.

3.3.3   Making a schedule
- Supervisees should be asked to prepare a reasonable schedule for producing chapters. The schedule should be broken down into chapters indicating when they are due. Supervisors need to

ensure that supervisees meet the datelines that have been set and encourage them to schedule daily writing goals.

3.3.4 Starting to write the thesis
- Supervisees should be encouraged to write daily to ensure that writing becomes a habit. As indicated earlier, some supervisors encourage students to write at least 500 – 1000 words a day. The concept of "writing up" should be avoided as it gives the indication that writing takes place only at the end of the research.

Supervisees need to be advised to bear in mind the four key principles in thesis writing are:
- Learning comes through writing.
- Quality comes through revision.
- Fluency comes through regular writing.
- Writing should be a habit.

3.4 PROVIDING QUALITY FEEDBACK
Feedback plays a crucial role in the writing process. It acts as an intervention platform to meet the required standards of writing. Feedback provides direction for the writer to improve writing and tells the writer if writing goals have been achieved.

Among the main concerns about feedback are:
- Feedback is not well directed
- Illegible writing
- Miscommunication
- Incomprehensible acronyms
- Too little feedback
- Too much negative feedback
- No positive feedback at all
- Feedback only at the surface level
- Feedback that does not encourage self-reflection
- Conflicting feedback from supervisory committee

In order to overcome these concerns, it is suggested that feedback should meet the following criterion:
- Use of the sandwich technique. In this technique, feedback should first start off with praise, followed by the issues and ending with praise again. This is to ensure that the writer is not discouraged or demotivated.
- If negative or critical feedback is essential, it should be written as a suggestion. For example, Perhaps, you could have a look at this paragraph and see if it links to the main argument.
- In order to avoid the issue of illegible handwriting, electronic feedback should be the norm. This can be done using the REVIEW function in Microsoft WORD.
- Vague feedback such as "Re-do", "Not-clear", "Read more" should be avoided. These are not well directed and will not benefit the writer.
- Feedback should be a dialogue and not a monologue. In other words feedback should be provided in a conversational tone. As an example,

instead of striking out a paragraph, the supervisor may write: Do you think this paragraph is necessary?" This would allow the supervisee to reflect and re-consider if the paragraph was indeed necessary.

- Feedback should build a peer-to-peer model of the supervisory relationship. The literature on feedback practices widely reports that this sort of relationship encourages openness. One would not normally cancel a paragraph in red if it was from a colleague but merely write a comment in dialogue form. The same consideration should be given to the supervisee.
- If feedback is provided by a supervisory committee, supervisors should go through the feedback and provide a clear direction to the student. Avoid conflicting feedback. Discuss feedback with the supervisory committee before giving the feedback to the supervisee.
- Feedback should be prioritized, guiding students on what should be done next.
- Feedback should encourage students to revise, rethink, and reflect on what they have written.

3.5   LANGUAGE PROFICIENCY

It should be noted that some universities have a policy on language proficiency. One university for example, has this clause in its supervisory contract: Written work that is not carefully edited or proofread will not be read but returned to the student for revision.

The implication is that a student is expected to submit only drafts that are written in acceptable academic English. The supervisor is not responsible for editing or proofreading supervisee's written work.

The supervisor can play a role as a teacher if there are grammatical or language concerns in the submitted work. Once the initial teaching is done, the supervisee is expected to ensure that such concerns are not repeated in subsequent drafts.

In some universities, supervisors are burnt out because of the massive amount of editing they do. While they justify that this is done in the best interests of the candidates, one has to realize that this practice creates two serious problems. First, because supervisors become so forensic about surface features of language, they tend to forget the bigger picture of the thesis. Second, supervisors cannot guide and direct candidates forever.

The research degree is a process where supervisors introduce new scholars into an academic community which certainly has to come with skills such as proficiency in the language and the academic discourse.

CHAPTER 4
ASSISTING STUDENTS WITH PUBLISHING

4.1 INTRODUCTION

Publishing is a process where academics, scholars, emerging researchers and emerging scholars – (and this includes postgraduates as well) have their work evaluated and eventually accepted by experienced peers.

When an article is submitted to a journal, it is read by experts in the field. These people are known as referees. Referees usually scrutinize the article so that it meets standards established by the field of study.

In order to achieve an acceptable standard, referees request revisions if they are of the opinion that the article needs to be improved. This process of refereeing is rigorous, as at times it requires re-writing of multiple drafts before an article is accepted as worthy of publication.

Once revisions have been made to meet the high standards of the journal, the article is accepted and is printed (some journals do this electronically) and circulated.

4.2 WHAT ACADEMIC JOURNALS ARE

Academic journals are the official "chat room" of academics and scholars. This is where they exchange ideas and extend knowledge in the field.

Some journals, called "citation indexed journals", list articles in databases, such as Biological Abstracts, Compendex, EMBASE, IEEE Xplore, Inspec, Science Citation Index, Science Direct, Scirus, Scopus, Social Science Citation Index, Springer Link, Web of Science, etc. What this means is that the article becomes part of the body of knowledge and is easily (electronically) accessible to peers in the field.

This also means that, as the author of the article, your postgraduate student has made a new contribution to knowledge and that their work will be read, discussed and even quoted by the academic community.

Researchers who type in key words will be able to locate article in databases. The article may even be listed as compulsory reading for courses. There is no greater joy for emerging scholars than to have articles published and quoted by scholars.

4.3 TYPES OF PUBLICATION

Postgraduates have many avenues available to them for publication. These include academic journals, conference proceedings, book chapters, books, monographs, or articles in popular magazines.

Before sending out an article for publishing it is wise to know the impact of these "avenues". Impact refers to a number of things: firstly, it refers to how rigorously an article has been scrutinized. Secondly, how widely and easily accessible the article is. A common measure used is the "impact factor" which is a measure

of the frequency with which an article in a journal has been cited in a given period of time. For more information see
http://www.sciencegateway.org/rank/index.html.
http://www.hsl.virginia.edu/services/howdoi/hdi-jcr.cfm
http://scientific.thomsonreuters.com/tutorials/jcrweb3/

To understand publications further, we will look at three types of journals - citation indexed journals, refereed journals and departmental journals.

4.4 JOURNALS

4.4.1 Citation-Indexed Journals

A citation-indexed journal is one which is typically published internationally by leading publishers such as Elsevier (www.elsevier.com/), Springer – International (www.springer.com/), Taylor and Francis (www.taylorandfrancisgroup.com/), and Wiley-Blackwell (www.wiley.com/). Information on other international publishers and journals can be browsed at http://www.ulrichsweb.com/ulrichsweb/.

When an article is submitted to a journal published by these leading publishers, it is first scrutinized by the editors of the journal. Some journals also check for plagiarism by sending articles to www.turnitin.com. If the editors are satisfied that the article is appropriate in terms of the aims of the journal, they will then send it to (generally three) experts in the field. It should be recalled that this process is called "peer reviewing". A term used with peer reviewing is "double blind reviewing". This means that as the author, the author does not know the referees and the referees do not know who the author of the article is.

The reviewers (also known as referees) will read the article and make judgements as to if the article can be accepted as it is, or has to be revised. Most of the time, reviewers ask for revisions. In a way, they act as the gatekeepers of the discipline.

The reviewers' comments are usually synthesized by the editor and sent to the author of the paper. This usually takes between 3- 4 months. The author is given a time frame to revise and send the paper back to the editor for further review. Journals may send these revised articles to the same or to new reviewers. Again, this process may take another 3-4 months.

The paper then goes through the same review process. This is called the "rigorous reviewing process" which involves critical evaluation of the article and requests for multiple revisions until it meets the standards of the journal.

The main aim of this process is to ensure that the article meets the standards of scholarly articles in the field. It may take up to a year before an article appears in print.

But what makes journals published by leading publishing houses classified as high impact journals is that the articles are indexed in important citation indexes such as Web of Knowledge and Scopus. Web of Knowledge is made up of Science Citation Index, Social Sciences Citation Index, and Arts & Humanities Citation Index. Scopus on the other hand is produced by Elsevier. These data bases are usually used to measure research output, research impact, productivity and also as performance indicators. Besides the web of knowledge and Scopus, another useful software that can provide useful citation information is Publish or Perish – it can be downloaded for free at http://www.harzing.com/pop.htm.

Two issues stand out here when an article is sent to a publisher whose publications are indexed: first, the article goes through a rigorous refereeing process and thus is of an accepted standard in the field; second, the article is widely accessible to any researcher in the world via data bases (i.e the chances of it being quoted is high). This increases citations and the impact of publications thus providing favourable output metrics such as Hirsch's h-index.

Because of the rigorous process involved and its wide availability, articles published in citation indexed journals are regarded as journals with higher standing by the academic community.

Publications in citation indexed journals are usually used as a measure of a researcher's credibility. It should be noted that most leading universities expect publications in this type of journal for appointments and promotion purposes.

Another type of citation indexed journal is called an Open Access journal. Publications in these journals are made available on the internet and can be downloaded and distributed for non-commercial purposes. There are four types of Open Access journals: refereed-scientific periodicals, research area-specific archive servers, institutional repositories and self-posting on an author's home page.

Open Access is a new model of scholarly communication based on the principle that research should be readily available for anyone to read, download and circulate. There are arguments that open access journals have less impact, however, research demonstrates that Open Access articles are cited more frequently than comparable articles that are not openly available.

Open-access articles increase one aspect of impact – that is, availability. However, some open access journals do not subject articles to a rigorous review of an article. As an example, some open access journals, charge a fee and publish articles within a week of receipt and claim that the article has been reviewed when it has only been read by a non-expert. Such articles have been found to be seriously flawed in terms of content and language. As such, some of these journals have been blacklisted by institutions of higher learning. It would be wise to

check with your own institutions on the recognition of these journals before asking your postgraduate students to send articles to these journals for publication. A list of open access journals can be found at www.doaj.org.

4.4.2   Refereed Journals
In addition to citation indexed journals, researchers also publish article in refereed journals. Articles sent to refereed journals go through the same refereeing process – the only difference is that the articles published in refereed journals are not necessarily listed in data bases.

An example of this is the *English Teacher* which is a refereed journal but articles published in it are not easily accessible. Articles are only available as physical copies. Even though the article has gone through a rigorous reviewing process, it is not widely circulated and for this reason, the journal is usually not classified as a high impact journal.

4.4.3   Departmental Journals
A third type of journal is the departmental journals. These are in-house publications which provide an avenue for researchers to see their work in print. More often than not, the articles do not go through a thorough double-blind refereeing process, are normally circulated only among peers, and not listed in any data base.

Even though departmental journals have limited impact on the wider academic community, they provide an opportunity for researchers to share their research among colleagues and for networking and further collaborative research.

4.4.4   Conference Proceedings
Another form of publication is conference proceedings. A very common question which postgraduate students ask is about the impact/value of conference proceedings.

Conference proceedings may go through some form of refereeing process, but it is not as rigorous as the one for citation indexed or refereed journals. It is on very rare occasions that a writer has to write multiple drafts or even revise to get an article into a conference proceeding.

Conference proceedings may also be circulated only to the participants of the conference. What this means is that articles in conference proceedings may not be easily available to academics in the field. Because of these limitations, conference proceedings are not regarded as high impact publications by universities.

However, there are also conferences which review both the abstracts and the papers sent for the proceedings. In a sense, papers go through a rigorous academic process. Refereed papers are also made available electronically on the conference websites. An example of this the Quality in postgraduate research conference (www.qpr.edu.au).

Writers need to be cautious about submitting papers to a conference if they are conscious about the impact factor. While peer reviewed conferences are certainly viewed in high regard, it might be a good idea to advise postgraduate students to marshal their ideas at a conference, get feedback and then send it to a citation indexed or refereed journal.

4.4.5 Other Publications
Journals and conference proceedings provide opportunities for publications but so do academic books, chapters in books, monographs or feature articles in popular magazines.

Academic books and book chapters that go through a review process and are easily available certainly carry more weight. Monographs and publications in popular magazines raise the same concerns as conference proceedings, that is, rigorous reviewing and accessibility to a wider academic community.

Even though conference proceedings, monographs and book chapters may not be viewed favourable in terms of publication output, such contributions in fact add to the peer esteem of the author. In other words, an invitation to submit a chapter in a book, indicates that the author is recognised by peers in the field.

4.5 TARGETING PUBLICATIONS
Having understood the range and type of publications available and the impact of these publications, it would be wise to target high impact publications. However, it should be realised that the rejection rates for such journals are very high. Rejection rate for some journals are 80% !

When articles are rejected, the editors/reviewers usually provide valuable feedback which can be used to improve the article. Encourage postgraduates to discuss the feedback with you and guide them in dealing with it. You can encourage them to rewrite the article and send it to a different journal. The article can be kept circulating until it finds a home, that is, until it is published.

4.6 REASONS FOR NOT PUBLISHING

4.6.1 Personal Apprehension
One of the main reasons postgraduates do not publish is their personal apprehension. Common questions are: Am I knowledgeable enough to write a journal article? What do I write? Am I good enough?

Writing an article for a journal requires specific skills. Supervisors need to guide postgraduate students towards acquiring these skills. One way of learning is to scrutinize journals in the field.

This can be done if supervisors encourage postgraduates to become "style gurus". Their attention is drawn to the style, content, focus, format and structure of journal articles. This includes recording interesting words and phrases.

Many students also lack the academic discourse skills to structure their arguments.

Most journal articles have an abstract, introduction, background, methodology, findings, and implications. Journal articles are usually between 5000-6000 words in length. Supervisors can draw the attention of postgraduates to these details and set achievable writing tasks of the thesis itself.

Some aspects of the research that postgraduates are carrying out can be written as journal articles. As they are encouraged to prepare to write an article of their own, they can be advised to structure it in the way that the journal you examined has done. Once they know what to do, they will be free from the fear of what publishing entails.

4.6.2 Nothing to Write About

A second reason why postgraduates do not publish is that they feel that there is nothing they can write about. But, surely, it cannot be true that their research is not worth one or two articles.

Chances for new articles may present themselves in the course of browsing through journal articles in the field, when a gap is found during their review of literature, from the use of new methodologies or the discovery of new themes if they are engaged in qualitative studies.

Some postgraduates even have four to six articles published in a range of journals before submission and others have successfully turned their theses into books. Imagine the impact this has on the academic community.

If you are in the humanities and your student is doing case studies, each case study can be a journal article. Similarly, each of the themes and subthemes in a qualitative study can be turned into a journal article.

If you are in the sciences, and you have conducted a series of experiments, you can encourage your students to report the findings of each of these experiments. Some journals also publish work in progress. The onus is on the supervisors to discuss with students how to generate articles.

4.6.3 Fear of Being Judged

A third reason why postgraduates do not publish is the fear of being judged. This is also referred to as "stage fright".

Postgraduates may feel that they are not good writers and that they are going to embarrass themselves. This is where the supervisor plays an important role in encouraging and guiding the student. Setting achievable writing goals and once students have achieved these goals, praising them will build their confidence. If they have not been able to meet specific goals, provide ample examples and guidance.

As supervisors we need to understand that postgraduates are all emerging scholars and have to start somewhere. We too have all had to learn to write for academic journals.

The advantage of this kind of journal writing is that it is not an on-demand kind of writing, that is, postgraduates can take their own time and most importantly, they can write as many drafts as they need to.

Secondly, they do not have to do it alone. They can give drafts to their peers and supervisors to get critical feedback. As a supervisor, you should provide critical and constructive feedback and postgraduates will certainly benefit from your expertise.

Revision helps clarify ideas. Consider feedback as an opportunity to improve work. Revision usually leads to new discoveries. By addressing the feedback, students will be able to re-craft their articles. They may have privileged knowledge of some aspects of their work, but readers may not understand what they are trying to say. The feedback you provide will help them clarify sections that are not clear to their readers.

Most of the time, articles are accepted with requests for revisions. This is good training as this is exactly what postgraduates will be expected to do after their viva. If the article is rejected, the reviewers will provide the reasons for the rejection and make suggestions on how to improve a subsequent version of their article.

4.7   WHY PUBLISH DURING CANDIDATURE?

4.7.1   Self-Esteem
The first intrinsic reason for publishing is that your names (students' and supervisors') will be listed in an international journal and subsequently in databases – this is assuming that they have published in a citation indexed journal.

The students' self-esteem and reputation are raised and they will have made a territorial claim to their area of research. Publishing makes them visible to a wider academic audience and recognizes them as an authority in their field.

This will give them personal satisfaction as they will have filled a gap in the body of knowledge, and they are now part of the literature.

4.7.2   Feedback from Experts
One of the main reasons why postgraduates should publish is to get feedback from experts in the field.

This feedback is crucial as it actually helps to make the thesis into a well-structured argument. If reviewers write comments such as – "the literature needs to be updated", they will usually provide a list of references.

The students can use this list to re-work their article and at the same time use the same information for the literature review in their thesis.

At times, reviewers may suggest more signposting and sub-sections to structure an argument. This sort of feedback provides a sense of direction not only to improve the article but also to ensure that the thesis is well organised.

4.7.3 Clarify Thinking

Even though extrinsic motivation plays a small role in publishing, writing for journals clarifies one's thinking. It is a lot easier to craft ideas when one sees them on the computer screen or in print.

After having written the article, encourage your students to re-read and reflect on what has been written. This usually leads to further discoveries and re-shaping of ideas.

4.7.4 Favoured by Examiners

One crucial factor that should be considered when encouraging postgraduates to publish is that examiners view publishing as something positive. In a study that looked at how experienced examiners examine a thesis, it was reported that examiners are impressed by work that has been published in citation indexed/refereed journals.

This research also suggests that examiners view positively work that has actually gone through the rigorous peer review process of good quality journals.

After this rigorous peer reviewing process, the article gets published in academic journals. This is held in high esteem by examiners.

If your postgraduate students have articles published before submission, it is like saying that they have met the standards. Imagine including "a version of this chapter was presented at the xxx conference or a revised version appears in the xxx journal" in the thesis. The examiners will surely be impressed.

4.7.5 Extrinsic Motivation

Besides intrinsic motivation, the reasons for publishing include extrinsic motivations. Most students ask if they can be employed as lecturers in universities after graduation. Some Master's students ask if they can get a scholarship to do their Ph.D. To both these groups of students, we can say that if they have published, they stand a better chance.

Universities are research intensive institutions that prefer to employ people who have research and publication. If your students have done this during their candidature, they will definitely have a better chance of gaining employment.

Given a choice between a fresh graduate with no publication record and one who has published three or four articles in refereed journals,

both universities and funding bodies would prefer the second candidate. Thus, the extrinsic motivation for publishing could be for career enhancement, securing external funding/scholarship and also promotion once they have started on their career.

4.8   THE PROCESS OF ARTICLE SUBMISSION

It should be recalled here that when an article is sent to a journal, the editors read through to evaluate if it meets the standards of the journal. If the editor is satisfied, the article is sent for review.

Good journals usually will acknowledge receipt of manuscripts and will keep the writer informed of the review process. Reviewers usually take between six to eight weeks to read manuscripts, provide feedback and make a judgement on it. If your students do not receive any feedback within the stipulated time, get them to contact the editor.

There are basically four types of decisions that you can expect from the reviewer. The article is accepted with no changes, request for minor/major revisions or the article is rejected.

4.9   REVIEWER COMMENTS

Some reviewers use positive feedback to encourage the writer. These reviewers are of the opinion that their job as reviewers is to make the article better. Some types of these comments are :
- Please check your references and update them.
- Please provide a link between your introduction and conclusion.
- We are happy to reconsider your work if you can address the following concerns.

Sometimes one may get polite rejections such as:
- Thank you for submitting your article for review. The paper has been reviewed by three scholars. Unfortunately, I have to inform you that the paper is unacceptable in this journal ...
- I regret to inform you that your paper is not accepted. I wish you every success in finding a suitable journal for your article.

At times the author may receive less- than- polite rejections:
- The author is merely narrating the literature without any synthesis.
- Poor interpretation of data.

Authors may also receive savage reviews such as:
- Unfortunately, you can't write.
- Your language is atrocious.
- My undergraduate students can write better

4.10 DEALING WITH REVIEWER COMMENTS

Articles that are accepted subject to either minor or major revisions indicate that the author has something of substance to say. This has to be considered as an invitation to contribute towards the body of knowledge.

The rejection of an article does not mean that your students are unable to write. It only means that they have not considered the audience for that particular journal. Advise them to leave the comments for a few days and then go through each of them and try to address the concerns raised by the reviewers. Use the feedback to improve the writing and the quality of the article. Once this has been done, encourage your students to send their articles to another journal.

As for savage reviews, just remember, *a statue has never been built in honour of a critic!*

4.11 WHY ARTICLES ARE REJECTED

There are a number of reasons why articles are rejected. A scrutiny of the available literature indicates the following:
- Lack of theoretical depth
- Not grounded in previous literature
- Inappropriate methodology/research questions
- Incoherent writing
- Poor presentation/interpretation of the data
- Not up to date with current literature
- Too descriptive and not theorized
- Poorly presented, badly written and inadequately argued
- Author guidelines not followed

Articles that are accepted generally have the following characteristics
- Professional appearance
- New/novel treatment of the subject
- Very thorough
- Guidelines followed
- Captivating title of manuscript

Journal editors suggest the following to improve manuscripts:
- Write clearly, logically and sequentially
- Study and follow the author guidelines
- Have manuscripts critiqued before submission
- Think what readers want to know, not what you want to say
- Be a stickler for details

4.12 JOINT AUTHORSHIP

A common problem reported by both students and supervisors is how to decide on authorship issues. Among the most common questions are: Should the supervisor be the first author and corresponding author of journal articles?

Should co-supervisors be listed as authors even if they do not contribute to the article?

The authorship of publications can be determined by following the guidelines of the Vancouver protocol. The Vancouver protocol is an internationally recognised code of practice used by the world's top universities to determine authorship in publications. The protocols state clearly that an author is one who is involved in:
1. The conception and design, or analysis and interpretation of the data;
2. Drafting the article or revising it critically for important intellectual content;
3. Final approval of the version to be published.

The use of the word 'AND' should be noted clearly. This means that an author or co-author should have done all three to be considered a legitimate author. This also means that someone who helps in the lab, someone who secures the funding, an "invisible" co-supervisor, an administrator or someone who provides guidance on publishing cannot be listed as an author unless they have met the three criteria above. The decision as to who the first author is can be negotiated based on the contributions to a paper, but it is the norm that the student is the first author in publications originating from a thesis. A useful website that provides guidance on author order is http:www.authororder.com.

4.13 CONCLUSION

As a supervisor, you have to open the windows of publishing to your postgraduate students. Publishing during candidature supports the core business of any university – that is, disseminating research. It is also the responsibility of a member of academic staff to make research known. Publishing does not come easily, and the rewards are not immediate. Authors need time to conceptualise research, collect data, interpret and then write the paper. All this takes time.

CHAPTER 5
EXAMINATION AND VIVA

In the doctoral examination process, a thesis is usually examined by internal and external examiners, preferably the external examiner is an international examiner. Usually, three examiners are invited to respond so that the university will have the benefit of a range of examiners' reports.

5.1   SELECTING EXAMINERS

Selecting the examiners forms a crucial part of the examination process as the examiners decide whether the student is going to pass or needs to do a considerable amount of revisions before he/she can be passed. This is a testing time for the supervisor as supervisors may feel that they are being examined too!

Research on doctoral examination process suggests that examiners can be nominated based on four criteria, namely:
- Experience in examining
- Expertise
- Reputation
- Publications

In terms of experience, it is advisable to select an experienced examiner. The literature on examiners suggest that experienced examiners expect the thesis to pass and are reluctant to fail a student and have a formative rather than a summative view of thesis examination. It has also been suggested that experienced examiners devote considerable time to examining each thesis and most of them are influenced by publications. This has an implication as it suggests that it is advisable to ask your student to publish during candidature. On the contrary, it has been found that inexperienced examiners wanted to fail the first thesis as they were unable to benchmark.

5.2   BEING AN EXAMINER

Examiner reports play a crucial role in postgraduate examination both at the Master's and Doctoral level. The examiner report is at both levels the culmination of many years of supervised research.

If you are asked to examine a thesis, it is good to accept. An invitation to examine a doctoral thesis is an indication of peer esteem – this means that peers in your field recognise you as an expert and as a gate-keeper of the discipline.

Examining a thesis also provides great opportunities for you to enhance your supervisory skills as it gives you additional insights into the doctoral process and the expected standards in a thesis. By comparing the report that you write with other examiners, you may get a different view, and this certainly enhances your experiences in becoming a supervisor.

However, if you are not comfortable and feel that you do not have sufficient expertise, or if you believe that the candidate has taken an approach that you are not comfortable with or you cannot examine within the time frame, do not jeopardise the student's journey – reject the offer!

5.3   EXAMINING A THESIS

The first impression of a thesis counts! Acquire an overview of the entire thesis with a quick scan of the abstract and table of contents, the introduction and the conclusion. The argument of the thesis ideally should be clear from the abstract, introduction and conclusion. It should be noted that studies on how experienced examiners approach the examination indicates that most of them read the introduction and the concluding chapters first. Most of them too make a judgement by the end of the second chapter.

Some strategies to examine a thesis:
- Distance yourself from your own research.
- Schedule blocks of time to read without interruption.
- Make notes systematically –note areas that confuse you and how you can advise the student to approach revision.
- Consider whether the thesis makes a difference in your field. Does the thesis change the way people think about an issue.
- Consider whether the questions posed at the beginning have been addressed effectively.
- Consider whether the core material is worth publishing.
- Does the candidate illustrate critical awareness of the literature.
- It is not the examiner's job to mark or make note of every editorial error.
- Before writing the report, read the requirement of the university.
- Be aware that your report will be read by other examiners, the supervisors and the candidates.
- Ensure that your judgements are well substantiated.
- A "generosity of spirit" is required towards the candidate who has probably invested a lot of personal energy and time.
- Provide guidance to the candidate in any areas that you think an improvement is needed.
- Put yourself in the supervisor's position and consider how the report can be used to guide the student. As such, your comments must be clear and well directed.
- Take a break between writing the report and sending it off.
- Read the report again from the point of view of the candidate/supervisor and see if it feels right.

5.4   ASSESSMENT OR FEEDBACK

Examiners may consider the examination as a 'gate keeping' task, and/or as an opportunity to provide developmental experiences to the candidate. The examiners usually make a summative judgment and also provide developmental experiences in the form of feedback. In other words, examiner reports consist of two components. A first component of the examiners' reports is a summative assessment where examiners make a judgment as to whether the thesis has met the standards established by the discipline and the university for the award of the degree. This judgment could range from accept the thesis

as it stands, accept with minor revisions, accept with major revisions, resubmission or fail. The second is the developmental and formative component, where examiners provide feedback to assist the candidate to revise the thesis so that it meets the expected standard.

It should be noted that examiners' assessments of theses are usually nonterminal in the sense that postgraduate candidates are expected to take on board examiners' comments and revise. While an initial assessment is made, which could range from 'accept with distinction' or 'accept with minor corrections' or 'revise (major corrections)' to 'resubmit', it is the norm to change this assessment to accepting the thesis once revisions have been made and the goals met. Recent literature has highlighted the notion that doctoral examiners' assessments are in fact considered feedback on work in progress.

The examination at the postgraduate level is very different from any other circumstance. In a public examination or a final assessment at the end of a semester, summative assessments are the norm. Often the candidates do not have any opportunity even to see their work to make amendments to improve. However, at the postgraduate level, the examination is entirely different in the sense that a piece of work (thesis) is written under supervision and then sent out for external assessment. This is where the difference lies. Even though recommendations regarding the assessment of the thesis are made, the thesis can still be re-worked to ensure that the learning goals are met to the satisfaction of the examiners. In other words, examiners' assessment of a thesis is not final, and the candidate is given the opportunity to close any gap identified by the examiners.

Given the crucial role of feedback in the assessment process and for the successful completion of the examination process – the candidate will only be awarded the degree if she or he succeeds in closing the gap between actual and desired performance, between submitted draft of the thesis and the final one – there seems to be a need to emphasize the role of feedback in the postgraduate thesis examination process. Such an emphasis has implications for all parties involved in the examination process, the examiners, the university, supervisors and candidates alike.

What this means is that when you write the examiner reports, keep in mind the following points:
- If the student has achieved a goal, for example written a critical literature review, praise the student for a job well done.
- If the student has not achieved a goal, i.e. not written a critical literature review, make suggestions as to how this can be done. Making a statement like – *the literature review is not critical*, is not going to help the candidate or the supervisor.

5.5   THE VIVA
The viva voce or normally called the viva refers to examination conducted by speech. Some other terms that have been used to describe the viva are the oral, oral test, oral interview or oral examination. The viva serves three main purposes:

a) The first purpose is examination. This includes the authentication of the thesis, to consider if the student is able to demonstrate mastery of the materials and has a command of oral medium and content. In the examination process, the viva aims to locate the research in a broader context. The viva is held to check the understanding of the student, the ability to present research, defend the thesis, respond to criticism and to enable the student to clarify areas of weakness.

b) The second purpose of the viva is to provide two types of development to the candidate. The first type is basic development. This means that the aim of the viva is to raise the standard of the thesis to an acceptable level. This could include rewriting certain sections for clarity or adding in current references. A second type of development is advanced development. This means that the examiners are satisfied with the quality of the thesis and the viva is seen as a platform to provide guidance on publication, future research and collaborative research (perhaps with the examiners).

c) A third purpose of the viva is to adhere to a ritual or a tradition. All universities in Malaysia require a viva. It is considered a formal gate keeping process and it varies among institutions. In Malaysia, the candidates or the supervisors are not provided copies of the examination reports prior to the viva. In some countries (e.g. New Zealand), both the supervisors and candidates are given the reports a few weeks before the viva to enable them to prepare for the viva. The viva is not seen as an examination but more of an opportunity for development.

5.6   PREPARING STUDENTS FOR THE VIVA

When your student is called for the viva, you will need to guide the student to attend the viva. Some important things that you can advise them on are:
- Research presentation skills.
- Focus only on the key points during the presentation.
- Do not clutter the power point slides.
- Ensure the slides are effectively designed.
- Practice presentation.
- Formulate possible questions.
- Guide the student to answer questions politely in the following manner:
  - Non-confrontational
  - Justify ideas and conclusion
  - Present ideas firmly but courteously
  - Do not become argumentative
  - Students can agree to differ in a viva but it should be substantiated
  - Examiners like candidates who can accept criticism.
- Ensure student is familiar with the relevant sections in the thesis by referring directly to the text.
- Show enthusiasm for their work during the viva.
- Be reflective.
- Make eye-contact with the examiners.
- Have mock viva with the supervisory committee.
- Dealing with difficult questions and difficult examiners.

Students usually become panicky when they are called for the viva. The supervisors play a crucial role in ensuring that the students remain calm and are emotionally stable. You can tell the students that the viva is a unique opportunity for them to get feedback from experts in the field and it is also an opportunity for them to clarify any areas the examiners may have misunderstood. Finally, tell them it is an event of acceptance – the viva is a celebratory ritual!

Some questions which students frequently ask about the viva are:
- Am I expected to know everything in my field?
- What if I can't answer a question?
- Should I admit weaknesses in my work?
- What if I don't understand a question?
- How well must I know the examiner's work?
- Do examiners go through page by page during the viva?

You can invite students who have gone through the viva to come and share their experiences with your own student. This can be incorporated as an activity of the peer support group.

Preparing the student for the viva does not happen only when the student is called for the viva. In fact, the preparation should start in the early stages of candidature. It should be noted the skills expected during a viva are research presentation skills and defending to criticism. These skills can be acquired by conference presentations and submitting papers for publication during candidature. The supervisor can act as a mentor during the candidature to ensure these skills are mastered by the student.

5.7   HOW TO QUESTION DURING THE VIVA

Research on the patterns of questions asked during the viva indicate that examiners focus on five key areas: conceptualization of the thesis (conceptual framework, theoretical framework), doctorateness (filling the gap in knowledge), professional relevance (link between professional knowledge and thesis) , content (relation between previous study and current study) and methodology (choice of methodology). Experienced examiners focus on the doctorateness by asking questions on the contribution to knowledge and critique of research. Inexperienced examiners however focus more on trivial things such as focusing only on minor errors and being confrontational with the candidate and other examiners.

Some tips to be an oral examiner:
- Adopt a friendly "developmental" approach to questioning.
- Restate questions if a candidate misunderstood the meaning.
- Rephrase questions to ensure the candidate understands.
- Start with questions that the candidate can answer.
- Questioning could include praise on achievements e.g. I like what you did here as it provides a clear understanding of the concept, however, I am a little confused in this section. Can you help me understand this part?
- Do not make fun of the supervisors.
- Allow student to take a break if necessary.

- Do not engage in an argument with other examiners in front of the candidate.
- Research indicates that examiners do differ in opinions. Be willing to change your views if necessary.
- Provide developmental advice to the candidate.
- Consider that the viva constitutes both assessment and feedback. Do not just pass judgment but also provide clear guidance to assist the candidate to achieve the standards you are expecting.

CHAPTER 6
DEVELOPING A VIBRANT RESEARCH CULTURE

6.1   NETWORKING

The research culture refers to an environment in which new supervisees learn the rule of the game. This culture includes understanding the research orientation of the discipline. The research culture that a supervisee is exposed to during the postgraduate studies is important as it is through this environment that the supervisee is prepared for a future career.

Doing a thesis or research work can be a lonely journey if graduate students do not receive support and help from their peers or colleagues. Therefore, students should be encouraged to meet often and engage themselves in academic and social activities with their peers.

Such activities will provide avenues for exchange of ideas with others who share similar research interests. This will broaden the students' views and perceptions and generate ideas that will contribute to the progress of their research.

6.2   WORKSHOP AND TRAINING COURSES

Relevant courses or workshops could also be organized to help graduate students manage their learning and become effective researchers. Generic courses, for example, would assist students' academic development.

Researcher development programmes and activities would prove helpful. These encompass courses or workshops which would help students in surviving their postgraduate studies and avoiding pitfalls. Examples of such courses or generic workshops which could be provided are as follows:
- How to get a postdoctoral position
- Managing postgraduate studies
- Academic writing
- Writing literature reviews
- Finding and using archives in research
- Keeping healthy while researching and writing
- Practical strategies for editing and proof reading
- An introduction to electronic journals
- Critical thinking and problem solving in research
- Effective reading and note taking
- Avoiding plagiarism
- Analytical skills in research
- Research ethics
- Coping with stress
- Time management
- Commercialisation
- Sustaining motivation at the postgraduate level
- Making the most of your supervisor
- Communication and presentation skills
- Preparing for viva voce

- Writing and presenting conference papers
- Writing for publication in research/scientific journals
- Writing research grants proposal
- Reviewing journal articles

An induction programme could incorporates the following topics:
- Beginning the candidature
- Transition from undergraduate to Masters/PhD.
- Essential tools – bibliographic software, data management
- Expectations of candidate and supervisor
- Memorandum of understanding between supervisor/supervisee
- Working with supervisors/supervisees
- Time management/ setting goals
- Concerns and potential solutions in supervision
- Resource issues in undertaking postgraduate studies
- Effective habits of successful research students
- Conference presentations

Both supervisors and students ought to attend these workshops.

6.3 CONFERENCES AND SEMINARS

Students should be encouraged to present their study to an academic audience. They can either present their proposal or various aspects of their research in progress. In this way, students will receive continuous feedback that will help them to reflect and move forward in their research. By sharing their ideas with academics from the department and their peers, students will gain more confidence with the research that they are doing.

All postgraduate students should be encouraged to attend at least one conference a year with possible funding from the respective learning institution.

Students should plan when to attend such conferences and it would be wise to get advice and recommendations from the supervisor.

Students should also be informed of the financial support provided by the university for those who wish to present papers and participate in conference and seminars. Some universities provide full sponsorship for students to present at international conferences overseas if a particular research is extensive and outstanding while some other universities allocate some funds only for international conferences in the country.

At these conferences, postgraduate students will meet people and seek to establish contacts among themselves. This provides them with peer support that can be beneficial when they encounter problems or difficulties in the course of their study.

In addition, they will have the opportunity to hear about the cutting edge of research and application in their respective areas of interest.

6.4   ACADEMIC ACTIVITIES WITHIN THE UNIVERSITY

Graduate students need to engage themselves in research activities at the university.

A half day seminar with senior postgraduate students can be arranged by the faculty so that new students will get acquainted with their seniors who share similar research interests. This will provide opportunities for academic discussions among students where they can exchange ideas, experiences, problems, and challenges on matters related to their studies. Such discussions can provide new graduate students with insights on what to expect from their programmes and how they could benefit from the experiences of others.

Students should also be encouraged to attend public and inaugural lectures.

6.4.1   Meeting Academic Visitors

One of the ways to increase networking among graduate students with expertise in their research area is through their engagement with academic visitors from other universities especially those from abroad.

The respective departments or faculties can arrange a postgraduate session with academic visitors to initiate academic discourse. The discussion can encompass various research matters, professional advice on certain areas, or exchange of opinions, as well as ideas on different backgrounds and contexts of doing research.

The department or faculty may also organize seminars where research students present research progress reports with the academic visitors as their panel. This may provide useful insights and constructive feedback that encourages the development of current research trends.

By participating in research discussions, graduate students gain confidence to collaborate with academic visitors and this platform can be a starting point for further collaborations.

A series of workshop can also be held with academic visitors to exchange and share information in developing graduate students generic skills.

Information and sharing of ideas on how to plan graduate students' academic journey especially from experienced supervisors can give positive insights for students to act on as they plan their own studies.

Postgraduate students who are interested in becoming academics should take the opportunity to seek knowledge on strategies to become academics from them. Such academic visitors are a valuable resource since they are usually experts in their fields and have extensive experience.

6.4.2 Social Events
There are various kinds of support that a university or graduate school provide for students which will enrich this learning experience as postgraduates. Organizing social events will help students get acquainted including festive gatherings.

The faculty or department could also organise a Graduate month/week dedicated to postgraduate students. UPM for example, organises a programme called Putra Sarjana. During this programme, the Graduate School organizes monthly seminars/courses for postgraduate students. Faculties too organize disciplines specific workshops and seminars.

6.4.3 Celebration
To encourage positive and a vibrant atmosphere, departments can show their appreciation of postgraduate students' success through departmental celebration, often to acknowledge students who have articles published in journals, passed their viva voce, and upon completion of a post graduate degree.

Such appreciation can encourage and motivate other students to take the same route or path and emulate this success and achievements.

6.4.4 Peer Support Group
Peers play a crucial role in the development of postgraduate students. Research on peer support groups clearly indicate that support groups play a valuable role in the completions rates of doctoral thesis. The supervisor can start a peer support group by inviting all the students (s)he supervises. Monthly meetings can be initiated and once this has been done, the students can organise events on their own. During these meetings, postgraduates can organize both academic and social events. The academic events could include reading drafts of each other, doing trial runs of oral presentations, reporting progress to get feedback, group reading of relevant articles, and sharing experiences. Social events could include having meals together with the supervisor, visiting members' homes, outings, etc. Supervisors and institutions can provide token financial support for coffee/meals and a place to meet.

6.4.5 Other Suggestions
The supervisor can also consider the following:
- Feature postgraduates in the faculty website giving information about their areas of research. This can be done to show that it is a student centred faculty/university.
- Ensure that all postgraduates attend an induction programme to get relevant administrative/support information.
- Introduce postgraduate students to other academic/non-academic staff.
- Encourage students to attend research seminars.
- Organise an annual writing retreat and ask students to present their work in progress to get feedback from colleagues/peers.

- Encourage students to get feedback from colleagues on their written work.
- Treat postgraduates as members of the department/faculty.
- Postgraduate representatives may be invited to departmental/faculty meetings to provide the student perspective.
- Involve postgraduates in research teams/writing teams and pass on career advice to them.
- Involve postgraduate students to review journal articles.
- Source for essential resources for your postgraduate students – a table, chair, secured storage, internet access, and a quiet study space if these are not provided by the department/faculty.

CHAPTER 7
CONCERN IN SUPERVISION

7.1   INTRODUCTION

Supervising postgraduate research in higher education is a challenging experience as it builds lifelong professional skills. The quality of the student supervisor relationship is essential in achieving many of the goals and related skills of postgraduate studies.

The supervisor-supervisee relationship brings about a power relationship in which (at least in the early stages) one is the master and the other the learner. Supervisory practices themselves play an important role in ensuring that the goals of a research degree are met. However, there are times when concerns in the supervision process may pose a threat to this relationship.

7.2   CONCERNS IN SUPERVISION

Some of the concerns that have been highlighted by students and supervisors include: personality-attitude of supervisors, supervisors' work-load, supervisory skills, co-supervision and the quality of feedback.

7.2.1   Personality and Attitude of Supervisors

Some supervisees reported that they had cordial relationships with their supervisors. They said their supervisors were supportive, friendly, and helpful and went beyond their expectations to make them feel comfortable. As an example, a female international student commented that her supervisor (also a female) took her home to meet her family. As a result of this, the student felt that her supervisor was concerned about building a good rapport so that the student felt comfortable with her supervisor and her research supervision.

Other supervisor traits that were valued were that supervisors had regular meetings, were always available via emails or short phone messages, were good listeners and were always pleasant. The underlying theme from these positive comments is that mutual respect between supervisors and supervisees is crucial in establishing a comfortable working relationship.

While some supervisors were perceived as promoting a positive supervisory relationship, surprisingly, some postgraduate students drew attention to examples of behaviour which do not promote a good supervisory relationship.

Concerns raised include supervisors being disrespectful, unapproachable, and unfriendly and at times even throwing tantrums. Many students said that they find it difficult to cope when their supervisors failed to recognize and respect them.

Postgraduate students are adults. They find it difficult to work when they are not treated as adult learners and naturally many felt that supervisors do not take into account that students have a life beyond their research degrees. Some of the many insightful comments made by students include:

- "I have a full time job and three children – to my supervisor, all these are invisible!";
- "I feel very scared to come and see my supervisor";
- "My supervisor is always throwing tantrums";
- "I feel very hurt and disappointed after every meeting with my supervisor", and
- "He [supervisor] makes me feel so small".

As a result of this personality-attitude tension, the students felt that they were not provided quality supervision

7.2.2 Academic Workload of Supervisors

The majority of the supervisors are also perceived as too busy to be effective in their roles as supervisors. If for example the lecturers teach four courses per semester, this translates into an average of twelve teaching hours per week. Class preparation, marking and administrative duties place very heavy demands on their time.

Since the supervisors may be extensively committed to administrative duties and teaching, the supervisees may find it difficult to get hold of them in times of need.

Appointments may be cancelled but what was more disappointing was that when the students were aware of the cancellation only on arrival for the appointment. One student commented, "I rushed from school as I was very excited to tell my supervisor about something I had read. There was a notice on her door saying that she had to attend a compulsory meeting. Two hours of driving to campus and another two hours back! I just can't take this."

At times, supervisors did not inform supervisees of long leave of absence. "I was shocked to know that she had gone on sabbatical leave for six months – I was never kept informed. How do I deal with this now?"

While this may be true in some instances, at other times, the supervisor had no choice but to cancel meetings as administrative meetings were called on extremely short notice. The heavy teaching hours, administrative workload and unplanned faculty/departmental meetings/activities seem to be some key elements that may contribute to the ineffective provision of quality supervision for postgraduates.

7.2.3 Supervisory Skills
Some supervisors may lack experience in research and postgraduate supervision which inevitably influences the quality of supervision that is provided.

One main concern was that, even if supervisors themselves failed to keep abreast of the latest developments in a particular field, they unrealistically expected the students to be up to date. This lack of commitment on the part of the supervisor and the inability of supervisors to help find solutions to problems or give advice raise concerns for research students.

A student lamented: "I asked about how to do a literature review and I was told that I should read up! I was hoping that she would show me how she does her own literature review as I honestly did not know what a literature review was." The student felt that the supervisor failed to supervise. "You are supposed to know this!" is another common piece of advice given by supervisors which is abhorred by postgraduate students. It seems as though a cry for help from the students is not recognized as a problem that deserves intervention.

Research paradigms too often seem to create problems if the supervisor holds his/her views very strongly. A comment from a doctoral candidate: "I'm doing a qualitative study where the literature does not foreshadow my research questions but my supervisor wants me to do a comprehensive literature review first – a data driven study does not warrant such an approach".

Another student complained, "Why does my supervisor ask me to write chapter one first when the literature clearly says that chapter one is the last chapter to be written as its aim is to 'market' the research"?

The main concerns raised by students are:
- The lack of experience in research;
- The lack of professional skills to tackle problems such as academic writing skills;
- Conceptions of research;
- Loneliness;
- Personal problems;
- Dealing with co-supervisors.

Some supervisors seem to lack the necessary supervisory skills to deal with problems in supervision. Supervisors were of the opinion that supervisors need to be equipped with professional supervisory skills to be able to play a more significant role in postgraduate students' research.

7.2.4 Providing Quality Feedback

Another common concern of students is that some supervisors do not provide timely feedback on drafts. It was alarming to note that a number of students commented that: "My supervisor has a habit of losing my drafts!"

Among other concerns were that supervisors were always criticizing, provided poor feedback and at times took a long time to provide feedback. A student made this comment: "My supervisor always puts

questions marks and deletes most of my paragraphs – what does that mean? Why can't she be more helpful?"

Appropriating students' work and expecting students to follow their ideas seem to be another concern which seems to be rampant. There were also instances where supervisors failed to read work in advance of supervisory meetings.

Conflicting feedback between drafts, illegible feedback, too little feedback and too much negative feedback without any constructive suggestions were factors that were not well received by the students.

One student concluded the general aftermath feeling of supervisory meetings in this way: "After meeting my supervisor and reading her feedback, I need a few days to recuperate!"

7.3   SUGGESTIONS FOR OVERCOMING CONCERNS

To overcome the above concerns, the following could be considered.

7.3.1   Code of Supervision

Research indicates that the quality of supervision and completion of a research degree is very much dependent on the supervisory relationship. The literature on supervisory problems indicates that there are personality and attitude concerns that may create tensions and hinder a fruitful supervisory relationship.

One possible reason for this tension is perhaps the lack of understanding as to the expectations inherent in the supervisor – supervisee relationship. Supervisors may expect students to have mastered some skills before embarking on a research degree but students may not have the necessary skills. Writing the literature review, for example, appears to be a common concern as many students are not aware of what this entails.

Students may also wait for their supervisors to tell them what to do but on the other hand, the supervisors may expect the students to be independent. In such cases, clear communication of expectations by both the supervisor and the students would reduce the tensions.

Open communication between students and their supervisors are the most important elements of supervision. Once a personal relationship has been well established, all else will fall into place. Transparency, freedom and friendship should be prevalent in postgraduate supervision.

In order to achieve this, it is suggested that a code of supervision be put in place. It seems essential that institutions specify the roles and responsibilities of both the supervisors and the students to ensure both collegiality and accountability.

In many universities, a code of supervision is in place to ensure that both the supervisors and supervisees know their rights and responsibilities.

As an example, the code of practice in some universities clearly stipulates that a doctoral candidate is expected to commit adequate time and effort to the project (usually 30 hours per week). It also specifies that the supervisor should remain conversant with the issues and the literature relating to the candidate's research.

Both parties are also kept well informed, by means of detailed guidelines, about grievances procedures. The codes of good supervision are also used as an index of quality assurance in many countries.

Another issue that needs to be dealt with is co-supervision. In most Malaysian universities, postgraduates are supervised by a team. When this is the case, expectations among members need to be made clear. More often than not, responsibilities are not discussed or clearly identified and this may creates tension. One way to overcome this is to have an early discussion on the responsibilities of each member of the supervisory team. It is suggested that the supervisory team members discuss the following and make these expectation clear not only to the supervisory team but also to the supervisee.

- Who takes final responsibility for the thesis?
- Can different members of the team be responsible for different sections?
- Are you okay with the student speaking with one supervisor without letting the other know?
- Are you okay with the student speaking with staff outside the supervisory committee?
- Who will read the drafts? Will all supervisors read and provide feedback on the same draft?
- Who will be responsible for the "administration" of the student?
- Who will organise supervisory meetings?
- Will the student meet only the main supervisor frequently?
- What personal skills do you bring to this team?
- What are your expectations regarding student publishing during candidature?
- How often will we meet in a team?

7.3.2   Mandatory Supervision Training
Supervisors need to be trained. This is to overcome some misconceptions as follow:

- "It is the accepted norm that once you have your PhD you should be able to supervise". Some supervisors indicated that the way they supervised was based on their own experience as students.
- Supervisor only had their own experiences as benchmarks and very often lacked the theoretical underpinnings of postgraduate supervision.
- Some supervisors focused only on the thesis/dissertation and were not aware that a research degree includes mastery of generic skills. The concept of graduate research experience was something new and alien to some supervisors.
- As a result of this, students are not given the support to reach professional maturity. For example, a student who completed her

PhD commented that that she does not feel adequately trained and has difficulty coping with her new role as a research supervisor.

The overall aim of a research degree is to help the student to develop autonomy. What this means is that one of the aims of supervision is to teach supervisees to be their own supervisor.

In order to enhance professionalism in the quality of postgraduate supervision, a formal training on supervision be made compulsory for all academics who are required to supervise postgraduate students.

In some universities, for example the University of Canberra and the Auckland University of Technology, it is compulsory for staff to attend postgraduate supervision training prior to supervision. In many UK universities (Leicester, Manchester, University College London) a certificate of academic practice which encompasses training in postgraduate supervision is essential.

Only supervisors who have gone through this programme are allowed to supervise. The mandatory training should include modules on the research degree as a process, generic skills, roles and responsibilities of supervisors, dealing with students with different learning styles and needs, cultural aspects in supervision, best practice in supervision, motivating students in their research, helping students to network, providing guidance in research methods, oral conference sessions with experienced examiners, examining a thesis, publishing during candidature, conference presentations and inducting the students into an academic culture.

In order to ensure that only experienced supervisors supervise, it is essential that senior academics act as mentors to new supervisors. In some universities, new academics are not allowed to be the primary supervisors but take on the role of co-supervisors.

Another option would be to form supervisory panels comprising lecturers with a range of experience. Supervisory panels have been found to provide effective ways to achieve research goals.

Departments too could have regular reflective sessions to discuss supervisory concerns and experiences. It has been said that doing a postgraduate degree is an isolated process – supervision is similarly a lonely process.

7.3.3 Supervision as Teaching
One of the main concerns expressed by supervisors is that they are overloaded with teaching and administrative work. As a result of this, they are unable to meet their supervisees frequently.

Most commented that they had a passion for research and postgraduate students provided an avenue for them to "indulge" in research.

However, given the current teaching and administrative workload, supervision seems to be an extra burden which supervisors had to contend with.

The workload of the supervisor has a strong bearing on the quality of supervision. Supervision needs to be considered as a form of teaching and should be included in the supervisor's workload. In some universities, supervision is provided for in the work plans.

Supervision time has to be respected and protected. Supervision is not a leisure activity or a passion that lecturers indulge in their free time. While lecturers are not allowed to cancel classes, a provision to protect supervision time is generally non-existent.

7.3.4 Feedback

The importance of feedback in supervisory practices is crucial. The purpose of feedback is to provide a sense of direction to students to develop their research. The major concern of the students is that the feedback that they had received seems to be of little value to them.

Sometimes feedback is vague and the students failed to understand the intentions of the supervisors. Supervisors on the other hand, unaware of the conflicting reactions they provided in their feedback, feel that students simply ignore their suggestions and do not value their feedback. This misreading and misconception of intentions in feedback by supervisors and supervisees will eventually lead to a breakdown in the supervisory relationship.

Supervisors need to be aware that research students are just learning about research and may be understandably sensitive about their emerging ideas and their drafts of academic writing. Critical feedback can be devastating to an insecure student if the comments are delivered unsympathetically.

Feedback has to be formative in nature i.e. providing guidance. The purpose of feedback is to encourage the supervisee to discover new links and ideas and develop them in a meaningful context.

The supervisor plays the role of an experienced scholar who inducts a newcomer into the academic community, by encouraging the student to develop progressively and with confidence in the field of research.

Feedback then should be timely, specific and frequent. It should also encourage reflective thinking and also preserve the morale of the student as a researcher.

When conflicting feedback is provided, it is the responsibility of the supervisors to reach a consensus and provide well directed feedback to the supervisee.

If a student received conflicting feedback, these can be emailed to the supervisory committee. The supervisors will discuss, come to a compromise and then provide feedback based on consensus.

It is not seem ethical to provide conflicting feedback to students. In some universities, candidates always meet the supervisory committee as a team and not individually.

In relating this to life-long learning and life after the PhD, this seems reasonable. When academics submit articles to journals, the editors are required to provide a sense of direction when there are conflicting reports from referees.

7.3.5 Memorandum of Understanding

It is becoming very common for research candidates to come up with a contractual agreement with the supervisors. There is a strong body of research that supports the notion that supervisory contracts have an influence on completion rate and graduate satisfaction. Even though this contract does not have any legal implications, it sets forth rules and regulations for the period of candidature.

In some universities, these contracts are called Memorandum of Understanding (MoU). The MoU typically includes sections that deal with all aspects of candidature: regular meetings, expectations, roles of supervisors/candidates, publishing, authorship, etc.

A sample MoU is provided in Appendix B. Supervisors can adapt the MoU to suit individual students and circumstances.

It is strongly suggested that a MoU or a supervisory contract be drawn up to ensure timely progress of the research degree.

Some local universities find the MoU useful. While, the code of supervision is an institutional policy, the MoU is between the supervisor and the supervisee.

The MoU includes details such as specific timelines, submission of written drafts, and time taken to provide feedback. The MoU is collaborative rather than directive which contributes towards a collegial atmosphere between supervisors and supervisees.

CHAPTER 8

SOFTWARE

8.1   INTRODUCTION

This chapter outlines some commonly available software and resources which can help supervisees to conduct their projects in an organised and effective manner. Supervisors should help their students by updating them about the relevant and up-to-date software and resources.

8.2   SOFTWARE

Supervisors need to be aware of current trends in software development to enable supervisees with their projects. The software listed below are categorised according to the needs of various stages in a research project.

8.2.1   Project Planning

Micro Office Project
Microsoft Office Project (office.microsoft.com/) is a set of usable, powerful, and flexible project management tools which, by keeping the user informed on the status of the project, provides better control over the work, schedules, and finances involved.

8.2.2   Literature Review

Endnote
Endnote (www.endnote.com) can be used to assist with bibliography creation by enabling references to be stored in a data base from which they can be retrieved and searched for using key words. This "cite while you write" function reduces of time (and errors) in documenting references. At the click of a button, Endnote formats the bibliography in any reference style (APA, MLA etc). References inserted in text are automatically formatted in the text and a reference to it generated in a list at the end of the text. One of the strong features of Endnote is that there is no need to type in bibliographic information such as name of author, year of publication, name of journal etc.

Endnote accesses libraries all over the world to search for such information and, once Endnote locates this information it is automatically saved in the data base.

RefWorks
Another bibliographic and information management software package is RefWorks (www.refworks.com) which provides online research management, writing and collaboration tools, designed to help researchers easily gather, manage, store and share all types of information, and generate citations and bibliographies.

Turnitin

Plagiarism is a serious offence in academic writing and many supervisees commit plagiarism without realizing it. Turnitin (www.turnitin.com) makes it possible to check work against millions of articles in its data base. Turnitin can also be used as a learning tool to ensure that any written work that is submitted to the supervisor is not plagiarized and can also be used to teach supervisees correct strategies in referencing and quoting previously written work.

Mendeley

Mendeley (http://www.mendeley.com/) is a reference manager and academic social network that can helps organize research, collaborate with others online, and discover the latest research.

8.2.3   Data Collection and Analysis

Microsoft Office Excel

Microsoft Office Excel (office.microsoft.com/) is a tool that can be used to create and format spread sheets to enable more convenient analysis of data, to organize data in table format, and present processed data in various forms of chart and to conduct advanced data analysis such as regression, averaging, Fourier analysis and ANOVA with 2-factor analysis

ORIGIN

ORIGIN (www.originlab.com) provides data analysis and graphing, multisheet workbooks; SQL queries, the automatic recalculation of analysis results and generation of new types of graphs.

SAS (Statistical Analysis Software)

SAS (www.sas.com) was developed for data analysis and data presentation in various forms, including tables and graphs. Among the many functions that SAS can perform are Analysis of Variance, Cluster Analysis, Survey Data Analysis, Nonparametric Analysis and Multivariate Analysis.

SPSS (Statistical Package for the Social Sciences)

SPSS (Statistical Package for the Social Sciences: http://www.spss.com/statistics/) is particularly useful for solving research problems. It can be used to discover new insights from data, test hypotheses and build powerful predictive models and to access a wide range of data and files.

NVivo

Similarly, if you are supervising a qualitative study, you might want to consider a computer assisted qualitative data analysis software called NVivo (www.qsrinternational.com) which codes and retrieves a large range of data: interview data or video recordings. Keying in the code, "peer support", for example, will display on screen (and print) the entire interview and literature that has been coded as peer support and allows for further conceptual development of ideas that can be linked with the

literature. Nvivo reduces the mechanical handling of data and allows the researcher more time to work on theories and concepts in the research.

The Ethnograph
The Ethnograph (http://www.qualisresearch.com/) processes qualitative data by text segments coded by the user.

The Anthropac
The Anthropac (www.analytictech.com/) is a social network and cultural domain analysis package.

MAXQDA
MAXQDA (www.maxqda.com/) can be used for qualitative data analysis – text interpretation, evaluation, theory development and conclusive theoretical testing in a variety of disciplines.

Microsoft Word
Microsoft Word (office.microsoft.com/) is widely used but few realise that it has many editing and formatting functions which are valuable for the researcher. It can be used to format large documents such as a thesis where it can, generate a table of contents , find and replace text and, through the "outline function" enables the writer to plan using different levels of heading by "collapsing" and moving large sections (even an entire chapter) to a different location by merely working on the headings. Compared to the cut, edit and paste function, this certainly is a safer way of managing ideas. With this "outline" function, it becomes relatively easy for students to see the argument in their writing and most importantly to ensure that their writing becomes both cohesive and coherent.

LaTeX
LaTeX (www.latex-project.org) is a document preparation system that can be used for any form of publishing, most frequently medium-to-large technical or scientific documents, articles, reports, books and complex mathematical formulae. It is not a word processor but a package that encourages authors not to worry too much about the appearance of their documents but to concentrate on getting the right content.