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Principalship mentoring in Singapore: who and what benefits?

Principalship
mentoring in
Singapore

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Introduction

Mentoring has gained general acceptance as an effective tool in human resource development in organisations. It is a term that originated from Homer's *Odyssey* where Mentor was entrusted with the responsibility of watching over, protecting and advising Ulyssus's son, Telemachus, who became Mentor's protégé. Since then, the term "mentor" has been broadly used to refer to a more experienced adult who is in a position to lead, help and guide a less experienced adult in the latter's professional and career development. The recipient of the advice and guidance by the senior expert (mentor) has been variously termed, namely, protégé (Alleman, *et al.*, 1984; Chong *et al.*, 1989), novice (Richards and Fox, 1990), intern (Barnett, 1990), potential principal (Walker *et al.*, 1993) and mentoree (Applebaum *et al.*, 1994).

Rationale

Studies on mentoring in the USA and the UK have traditionally been conducted in the business and industrial settings, as well as some key government departments. However, in the field of education, mentoring has also gained increasing popularity in the training of teachers and school administrators. In Singapore, mentoring has been used to improve the school management system. As part of an education course to prepare aspiring principals for possible appointment to principalship, a structured mentoring component is incorporated into the Diploma in Educational Administration (DEA) programme. This component, jointly supported by the Ministry of Education and the National Institute of Education (NIE), involves eight weeks of intensive mentoring at a mentors' school.

This paper presents a summary of the results of a study on principalship mentoring in Singapore (Boon, 1992). Findings on who and what benefits could be useful for practitioners, trainers and policy makers.

Mentoring in Singapore

Since 1984, mentoring has been the critical part of a one-year programme for the education of aspiring principals in Singapore. These aspiring principals are vice-principals identified by the Ministry of Education to attend the education

programme entitled Diploma in Educational Administration (DEA) programme. This programme, conducted by the NIE at the Nanyang Technological University in Singapore, includes a school attachment segment. It is during this school attachment period that mentoring is used to facilitate learning.

In the school attachment period mentors are experienced practising school principals who are in a position to help and guide aspiring principals' professional and career development. The mentoring principals are matched with at least a protégé each. These protégés are then posted to the school of the mentoring principal during the school attachment period. Details of the Singapore Institute of Education mentoring model are available from monograph No. 3 by Chong *et al.* (1989, pp. 22-5).

The Ministry of Education is actively involved in the selection of the mentoring principals, who are "among the most effective principals in the nation" (Chong *et al.*, 1989, p. 11). The most effective principals are likely to be those who demonstrate a strong inclination towards leadership, instructional leadership, thrust, work emphasis, consideration, and adaptability (Lim, 1984, pp. 72-4). Protégés are given a list of available mentors and are asked to negotiate among themselves for the mentor each prefers. Of importance was the provision of opportunities for the protégés to be exposed to a more varied style of management, a school of different composition, culture and philosophy.

Prior to the eight-week school attachment, a pre-attachment seminar is conducted to provide opportunities for mentors and protégés to interact and familiarise themselves with the executive skills to be learned as well as the mentoring process.

Research questions

The study by Boon (1992) on the mentor-protégé relationship among secondary school principals in Singapore is guided by three research questions:

- (1) Are there any significant relationships between the personal qualities and benefits of the mentor-protégé relationship, as perceived by the mentors and protégés?
- (2) Are there any significant relationships between the behaviours and benefits of the mentor-protégé relationship, as perceived by the mentors and protégés?
- (3) What benefits do the mentors and protégés gain from the "structured" mentoring experience?

A total of 16 hypotheses (see Appendices 1 and 2) were set in an attempt to answer the first two research questions. In Appendix 1, *H1* to *H8* were tested to answer the first research question: "Are there any significant relationships between the personal qualities and benefits of the mentor-protégé relationship, as perceived by the mentors and protégés?". *H9* to *H16* were tested to provide the answer to the second research question: "Are there any significant

relationships between the behaviours and benefits of the mentor-protégé relationship, as perceived by the mentors and protégés?”.

Method of study

Since the implementation, in Singapore, during 1985, of the mentoring programme until 1990, when data for the research was collected, there were a total of 44 mentors and 70 protégés. As a perception study of events that had taken place previously, it was necessary to limit the sample to participants over the period 1987-1990. This helped maintain a reasonable compromise between the element of recency and the number of respondents available for research.

From 1987-1990, there were a total of 27 mentors and 41 protégés. Some mentoring principals have more than one protégé. Given that this is a pair-wise study, the entire population of 27 mentor-protégé pairs were included in the survey. Two parallel sets of questionnaires were administered to the mentors and their most recent protégés. Out of the 27 pairs of mentors and protégés, a total of 24 sets of questionnaires were duly completed by both partners.

The parallel sets of questionnaires were developed based on research studies made on the mentoring process in both educational and non-educational settings. In the initial stage of developing the questionnaires, a comprehensive list of the terms and phrases that reflected the personal qualities, behaviours, and benefits of mentors and protégés was compiled. Phrases or words that reflected similar ideas were grouped together, for instance, in considering the personal qualities, terms like “frank” and “sincere” were classified under the term “openness”. Each of the parallel sets of questionnaires comprised four sections and sought to obtain responses with regard to the respondents’ “self” and “other” perceptions of personal qualities, behaviours and benefits.

The term “personal qualities” refers to the characteristics of the mentors and protégés which have an influence on their behaviours. They do not only refer to the inherent nature of the mentors and protégés, but are also reflective of their thinking and perception. Ten descriptors of personal qualities were used in the questionnaire. They are open, flexible, warm and caring, people-oriented, confident, capable, exemplary, independent, friendly and conscientious.

The term “behaviours” is defined broadly as the ways in which the mentors and protégés influence and respond to each other’s actions as they interact with each other. Behaviours may be learned, developed and enhanced through training. Ten descriptors of behaviours are used in the questionnaire. They are: showed initiative, interacted positively, gave/accepted instructions, offered/accepted alternative viewpoints, provided/took opportunities for undertaking risks, showed personal interest, helped in personal career goals, supported and encouraged, showed/learned principalship skills, and provided/sought visibility.

The responses to the “personal qualities” and “behaviours” components of the questionnaire items were based on a six-point Likert-type scale:

- 1 = strongly agree;
- 2 = agree;
- 3 = somewhat agree;
- 4 = somewhat disagree;
- 5 = disagree;
- 6 = strongly disagree.

A similar six-point Likert-type scale was used to obtain responses to the perceived benefits of mentoring:

- 1 = none;
- 2 = very little;
- 3 = little;
- 4 = a fair amount;
- 5 = much;
- 6 = very much.

The term “benefits” refers to the gains achieved by the mentors and protégés as outcomes of their interaction with each other during the mentoring experience.

The matched pairs of mentors and protégés were asked to indicate one of the numbers 1-6 to reflect their perceptions on the personal qualities, behaviours, benefits and their present relationship between their “self” and the “other”.

Two pilot tests were conducted prior to the administration of the final questionnaires. The parallel sets of questionnaires were refined after feedback by five matched pairs of mentors and protégés who came from different school settings. The reliability of the mentor protégés relationship questionnaires was measured by computing the Cronbach alpha coefficients for each item in the questionnaires. An overall Cronbach alpha coefficient of 0.95 was obtained.

For the purposes of cross-checking and to add depth and quality to this questionnaire data collection, a semi-structured interview schedule was also developed (see Appendix 3).

In carrying out interviews with the randomly selected mentors and protégés, every attempt was made to ensure that the information collected was reliable. This was done by satisfying a number of pre-conditions. First, confidentiality and anonymity were assured. Also, as a non-participant, the researcher was independent and objective in data collection. Furthermore, interviews were conducted in the interviewees’ offices after prior appointments had been made. The purpose of the interview was also explained to the interviewees.

A thematic study was made using the responses drawn from the interviews. Common points were grouped together and findings were summarised. Responses to the open-ended questions in the questionnaires were referred to in order to capture spontaneous responses. All sources of responses were categorised independently and adjustments were made consensually in cases of

minor discrepancies. Themes were then developed based on the broad categories of responses. Findings from the questionnaire instruments were cross-checked in interviews and by using other sources of information.

Hence, the interview data helped the researcher to clarify possible meanings respondents could have assigned to their questionnaire responses.

Findings

Who benefits?

Twenty-four mentor-protégé pairs were studied by the process described above. Findings in this study suggest that all mentors benefitted from mentoring regardless of the behaviours and personal qualities of their “self” and those of their protégés. Likewise, all protégés benefitted, conditional on the protégés’ behaviours as perceived by their “self” and their mentors. A summary of the outcome of the tests carried out is given in Table I.

Results of *H1* to *H4* and *H9* to *H12* showed that there was no significant correlation between benefits of the mentoring process to the mentoring

Null hypothesis	Variables (as tested in pairs)	Decision on null hypothesis at alpha = 0.05
1	MPQP-MBen	Accepted
2	PPQM-MBen	Accepted
3	MPQS-MBen	Accepted
4	PPQS-MBen	Accepted
5	MPQP-PBen	Accepted
6	PPQM-PBen	Rejected ($r = 0.45$)
7	MPQS-PBen	Accepted
8	PPQS-PBen	Accepted
9	MBP-MBen	Accepted
10	PBM-MBen	Accepted
11	MBS-MBen	Accepted
12	PBS-Mben	Accepted
13	MBP-PBen	Rejected ($r = -0.47$)
14	PBM-PBen	Rejected ($r = -0.48$)
15	MBS-PBen	Accepted
16	PBS-PBen	Rejected ($r = -0.48$)

Notes: MPQP = mentors’ perception of protégés’ personal qualities; PPQM = protégés’ perception of mentors’ personal qualities; MBP = mentors’ perceptions of protégés’ behaviours; PBM = protégés’ perception of mentors’ behaviours; MPQS = mentors’ self-perception of personal qualities; PPQS = protégés’ self-perception of personal qualities; MBS = mentors’ self-perception of behaviours; PBS = protégés’ self-perception of behaviours; Mben = benefits of mentoring to mentors; PBen - benefits of mentoring to protégés

Table I.
Summary findings on hypotheses testing

principals and the personal qualities and behaviours of themselves or their protégés.

This study also indicated that the benefits to mentors were attained regardless of the manner their protégés perceived them in terms of their personal qualities and behaviours. Similarly, their perceptions of their protégés' personal qualities and behaviours had little bearing on the benefits they gained.

There was consistency in the perceptions of the mentors and protégés towards the personal qualities of the mentors in eight out of ten of the items as categorised in "Personal qualities". Both the mentors and protégés agreed that mentors were open and flexible as they guided and helped their protégés. They also showed themselves to be warm and caring. Mentors were also perceived by their protégés and by mentors themselves to be people-oriented, exemplary, independent, friendly, and conscientious.

Pearson's correlation coefficient showed a significant correlation between the benefits from mentoring to the protégés and their perception of their mentors' personal qualities and of the behaviours of themselves. The correlation also was significant when tested with the manner they perceived their mentoring principals' behaviours and vice versa.

In sum, two statements (Chong and Boon, 1996) have been formulated that could answer the question "Who benefits?". The two statements and their corollaries are listed below:

- (1) All mentors benefit from mentoring.
 - Corollary 1: Mentors benefit regardless of mentors' personal qualities.
 - Corollary 2: Mentors benefit regardless of mentors' behaviour.
 - Corollary 3: Mentors benefit with protégés regardless of protégés' personal qualities.
 - Corollary 4: Mentors benefit with protégés regardless of protégés' behaviour.
- (2) All protégés benefit, conditional on protégés' behaviour as perceived by "self" and mentors.
 - Corollary 1: Protégés benefit regardless of protégés' personal qualities.
 - Corollary 2: Protégés benefit conditional on protégés' behaviour.
 - Corollary 3: Protégés benefit with mentors regardless of mentors' self-perception of personal qualities, but conditional on protégés' perception of mentors' personal qualities.
 - Corollary 4: Protégés benefit with mentors regardless of mentors' self-perception of behaviour, but conditional on protégés' perception of mentors' behaviour.

What benefits?

Table II presents the perceived benefits of the mentors and protégés as derived from the mentoring experience. A separate ranking list of the nature of benefits (Rank No. 1 means benefitted most) provides a clearer picture as to what the mentors and protégés perceived to be of greatest benefit to them.

Based on the five highest ranking of the benefits gained by the mentors and protégés (according to the mean values of their responses), two key statements can be made:

- (1) Mentors benefitted most in the following areas: they perceived that they have attained a higher level of professional knowledge, widened their collegial network, raised their level of motivation on the job, improved their job competence, and gained much psychological support.
- (2) Protégés benefitted most in the following ways: they were able to establish a wider collegial network, improve their principalship skills, gain greater self-confidence, attain a higher level of professional knowledge, and improve their job competence.

The mentors and protégés were similar in their perceptions that the mentoring experience helped them widen their collegial network. The mentoring system has provided protégés with ready-made network of principals with which to connect. This benefitted protégés a great deal as they experienced being a school leader. The close contacts they had with one another as well as with their mentors and NIE faculty members provided valuable opportunities for sharing experiences and knowledge. This in turn led protégés to be more professional in their work. They also gained a wider network of contacts outside the school system. Some mentors provided opportunities for their protégés to meet Ministry of Education officials, school advisory committee members and other members of the community. Protégés were able to establish and develop friendship ties with their mentors.

No.	Benefits	Mentors			Protégés		
		Mean	Standard deviation	Rank	Mean	Standard deviation	Rank
1.	Gained greater self-confidence	3.68	1.63	6	4.65	1.20	3
2.	Attained higher level of professional knowledge	4.12	1.17	1	4.65	1.13	3
3.	Increased level of motivation	4.00	1.53	3	4.42	1.39	8
4.	Better job competence	3.84	1.40	4	4.58	1.17	5
5.	Greater insight into career prospect	3.68	1.46	6	4.38	1.39	9
6.	Able to overcome role ambiguity	3.32	1.52	9	4.23	1.39	10
7.	Improved school management	3.52	1.42	8	4.69	1.05	2
8.	Wider collegial network	4.12	1.36	1	4.92	1.41	1
9.	Greater psychological support	3.76	1.56	5	4.54	1.53	6
10.	Greater commitment to job	3.08	1.78	10	4.50	1.53	7

Table II.
Benefits from mentoring
to mentors and protégés

In fact, 19 out of the 26 protégés (73 per cent) responded in the questionnaires that they continued to maintain contacts with their mentors at the time of data collection. Mentoring pairs who enjoyed a positive and successful mentor-protégé relationship continued to keep in touch through social phone calls, outings, annual social and school functions, meetings, seminars and workshops.

Interview data have supported the finding that mentors have benefitted as they guided their protégés. Some mentors felt that the presence of protégés in their schools was like “having a fresh pair of eyes to look at the school”. It was like a stock-taking exercise, “an appraisal in terms of the goals, policies, programmes, projects, activities and hidden curriculum ... to find out whether the school was a good nursery for pupils to grow”. For some mentors, mentoring was “like an ego trip”. It gave them satisfaction and a sense of accomplishment to see that they were recognised and treated with respect. As one mentor put it: “Basically, I felt good that I was asked to be a mentor. It was a form of recognition by the Ministry of Education of my capability. It was morale-boosting”.

The nurturing tendencies were clearly expressed by some mentors who recognised that they were instrumental in initiating beginning principals and have participated actively in the training of principals. A mentor commented: “There is intrinsic satisfaction in passing on skills and knowledge that I have garnered over the years”. Through mentoring, the mentors have also enjoyed a higher status and visibility within the school where the mentoring process took place. Staff members and pupils would see their principal not only as the head of the school but also an educator in a wider sense.

In-depth interviews with the protégés affirmed that they benefitted directly from the opportunities provided by their mentors in the latter’s schools during the period of mentoring. Through observation and translation of theory into practice, feedback and reflection, these protégés gained as they interacted with the mentoring principals and the school staff as a whole. Results of this study revealed that the extent of success of this mentoring process is more dependent on the behaviours of the protégés themselves and the perceived behaviours of their mentors. Protégés benefitted more from mentors if they perceived that their mentors possessed qualities such as openness, flexibility, warmth and care, confidence and were seen as being capable. Mentors who showed support and encouragement and those who provided opportunities for protégés to be visible were perceived to be significant in determining the extent of benefits that the protégés could derive from.

Protégés also benefitted considerably from the school management system. Their attachment to schools with a different setting and working with mentors holding different management styles and beliefs provided greater insight into how schools are run in a broader perspective. Their interaction with the staff members and pupils of the schools have enabled them to see for themselves the demands of being a school principal. They also benefitted from practice-oriented assignments and ultimately gained a higher level of competence and professionalism.

Discussion

The purposive pairing of a trainee principal with an experienced practising principal in Singapore has been a worthwhile programme, as indicated by the findings in this study. Both the mentors as well as the protégés have benefitted mutually within the framework of a structured mentoring scheme. This finding is consistent with studies conducted elsewhere. Earlier research on an effective mentor-protégé relationship has been discussed by many writers (Clawson, 1979; Hennig, 1970; Levinson *et al.*, 1978; Kram 1980 and Phillips, 1977). Recent articles by Bolam *et al.* (1995); Bush and Coleman (1995); Playko (1995) and Southworth (1995), have also noted the benefits of mentoring.

While wisdom in the literature has variously shown that mentor-protégé pairing tends to be mutually beneficial, the nature and extent of benefits point towards one where a strong, positive and trusting relationship provide the basis for both the mentors and protégés to achieve greater competence, self-confidence and a wider network of colleagues (Barnett, 1990; Kram, 1985; Playko, 1991 and Richards and Fox, 1990). Mentoring increased the opportunities available for protégés to provide and receive feedback concerning their professional performance. By doing so, they gained a broader and clearer perspective of what the principal's role entailed, especially regarding the complexities associated with maintaining school climate and staff morale. Protégés also developed their human resource skills as they became more conscious of the dynamics of working with teachers (Barnett, 1990, p. 22). Daresh and Playko (1990) and Playko (1990) also found that protégés developed confidence and competence in their work in addition to improving their communication skills. Protégés learned the "tricks of the trade" and at the same time built a collegial network in their workplace.

In Singapore, earlier studies by Low (1990) and Walker (1990) showed that mentors benefited from the NIE mentoring programme in several ways. Mentors learned to share skills and knowledge, reciprocity, self-awareness, broadened knowledge base and improved on qualities such as patience and tolerance. Becoming mentors also helped practising principals improve their image among staff.

Findings in this study indicated that both the mentors and protégés have ranked "wider collegial network" as their greatest benefit in the mentoring relationship. This is further supported by the fact that 73 per cent of the protégés responded that they still continued to maintain contact with their mentors even after they have completed the attachment programme. In the UK, the importance of tapping into professional networks have been viewed more in the context of it being an antidote to professional loneliness and sense of isolation felt by the new headteachers rather than as a vehicle for further career development (Bolam *et al.*, 1995; Southworth, 1995).

In addition to a widened collegial network among the principals, the mentors and protégés were able to attain a higher level of professional knowledge, an improvement in school management and a better job competence. As principals increasingly see themselves as colleagues or peers working towards producing

effective schools, the desire to connect themselves to the “right” network cannot be underestimated. A study was recently made by Brady (1996) on a peer assistance programme for principals in Australia. The programme was designed similar to Singapore’s structured pairing system. Among the advantages listed by the pairs of principals was the affirmation that the peer assistance programme helped produce a network system for them (Brady, 1996, p. 60).

The correlation between the perceived personal qualities and behaviours of the mentors’ and protégés’ “self” and “other” and the benefits of mentoring are now considered.

Findings in this study showed that the mentors benefitted from the mentoring programme regardless of their “self” and their protégés’ personal qualities and behaviours. It may thus seem indicative to anyone interested in designing a mentoring programme that it is not of paramount importance who the mentors were. However, this simplistic deduction is conditional on factors that are very similar to Singapore’s context where there is great homogeneity in terms of training and output of principals attained through intimate collaboration between the state authority (Ministry of Education) and the training centre (NIE/Nanyang Technology University). As noted by Chong *et al.* (1989), the benefits gained by mentors might not have derived directly from their interaction with the protégés, but rather from the entire process of being selected as mentors and hence being distinguished as “one of the most effective principals in Singapore”.

The results of the study also indicated that the protégés benefitted from mentoring regardless of their personal qualities. However, their benefits are dependent on their behaviours as perceived by their mentors and themselves. Their benefits are not dependent on the mentors’ “self” perception of their personal qualities and behaviours, but on their “self” perception of their mentors’ personal qualities and behaviours. This being so, it is beneficial for the protégés to heighten their awareness in the area of their overt behaviours which could be perceived positively or otherwise by their mentors. Hence, protégés need to learn appropriate behaviours in such a manner that can enhance their learning relationship with their mentors. In an study in Singapore, mentors indicated that successful protégés possessed certain qualities which enabled them to be “more amenable to learning from their mentors” (Chong *et al.*, 1989, p. 13). Such protégés tended to be confident, positive and respectful of their mentors. They were also more receptive to constructive criticism and feedback as they tended to be “open-minded, objective, non-defensive, insightful, and (have) a clear sense of personal strengths and weaknesses”.

Studies elsewhere have also lent credence to such an observation by way of highlighting certain desirable behavioural traits of protégés. Dalton *et al.* (1977), Hennig (1970) and Roche (1979) noted that protégés needed to show initiative, interest in career advancement, innovation, eagerness to learn, and willingness to take risks. Clawson (1979) also indicated that aspiring principals who sought

to improve in task competence needed to be adaptable and assume the role of being a learner while undergoing training. Hennig (1970) noted that good protégés possess a drive for independence, self-determination, and control of their own future. Along similar lines, Phillips (1977) cited drive, the ability to get along with all ages, knowledge, credentials, competence and trust as key qualities that protégés should possess. They were also noted to be conscientious, hard-working and work towards visibility.

While the need to learn the “correct” behaviours in an appropriate way is an essential ingredient for the protégés to succeed, mentors also need to reciprocate and respond appropriately to encourage their protégés to learn more effectively. Mentors note that they need to learn to give constructive feedback in a manner that would promote an open and trusting mentoring relationship. Literature elsewhere and in Singapore has consistently expounded on the personal qualities and behaviours of mentors that support a mutually beneficial mentoring relationship.

For example, Kram (1980) and Phillips (1977) found that effective mentors showed confidence in protégés and encouraged them to implement new ideas. They provided opportunities for practice and feedback, counselling and helping to identify options and define goals. Clawson (1979) noted that effective mentors excelled in sharing technical and organisational information, listening with empathy, keeping an open-door policy and interacting frequently with subordinates. He found that good mentors tended to be people-oriented, tolerated ambiguity, preferred abstract concepts, valued the work and company of their protégés, and showed respect and liking for their subordinates. Similar observations were also made by Alleman (1982) and Gray and Gray (1985).

In Singapore, feedback from mentoring principals showed that they took a personal interest in and displayed a positive attitude towards their protégés. They were perceived to be open to sharing, patient and unselfish, committed to their role as mentors and spent considerable time with them explaining and provided constant feedback (Chong *et al.*, 1989; Low, 1990; Walker, 1990). Protégés also commended mentors’ openness, good listening skills, respect for others, dedication and understanding.

Conclusions and implications

This paper has outlined the nature of the mentor-protégé relationship in the context of Singapore. A summary of the results of the research carried out has also answered the “who benefits?” and “what benefits?” questions.

Through a structured mentoring programme, the aspiring principals have benefitted from their more experienced mentoring principals. The extent of their benefits is dependent on their behaviours as perceived by their mentors and themselves.

The mentors, on the other hand, derived much satisfaction in the process of socialising their less experienced counterparts into their new role. They tended to perceive that they have benefitted from the mentoring experience regardless

of the perceptions of the behaviours and personal qualities of their “self” and that of their protégés.

The usefulness of this study lies in its expository approach towards understanding the nature of the mentoring relationship and the extent to which the two correlates, behaviours and personal qualities, influence the benefits derived.

Although the findings as summarised in this paper are based on a local study of the Singapore situation, practitioners and trainers in other countries keen in using mentoring as a strategy for human resource development could draw some useful tips from this Singapore experience.

To conclude, the discovery that the mentors and protégés in Singapore have mutually valued very highly the wider network that the programme has facilitated provides a useful lead for further research. What specifically did the principals mean by “network” and in what form or shape the network structure existed have yet to be studied.

An interesting question yet to be answered is that if there is some form of “network structure” in operation in the school management system, where are the boundaries drawn? Other questions could follow: How can one identify the structure of this network? What is the best structure that could help trainers to rethink when designing a mentoring programme? Answers to these questions could bear serious implications for future designs of such mentoring programmes.

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Appendix 1. Hypotheses to the first research question

- H1:* There is no significant relationship between the mentors' perceptions of their protégés' personal qualities and the perceived benefits to the mentors.
- H2:* There is no significant relationship between the protégés' perceptions of their mentors' personal qualities and the perceived benefits to the mentors.
- H3:* There is no significant relationship between the mentors' "self" perceptions of their personal qualities and the perceived benefits to the mentors.
- H4:* There is no significant relationship between the protégés' "self" perceptions of their personal qualities and the perceived benefits to the mentors.
- H5:* There is no significant relationship between the mentors' perceptions of their protégés' personal qualities and the perceived benefits to the protégés.
- H6:* There is no significant relationship between the protégés' perceptions of their mentors' personal qualities and the perceived benefits to the protégés.
- H7:* There is no significant relationship between the mentors' "self" perceptions of their personal qualities and the perceived benefits to the protégés.
- H8:* There is no significant relationship between the protégés' perceptions of their personal qualities and the perceived benefits to the protégés.

Appendix 2. Hypotheses to the second research question

- H9:* There is no significant relationship between the mentors' perceptions of their protégés' behaviours and the perceived benefits to the mentors.
- H10:* There is no significant relationship between the protégés' perceptions of their mentors' behaviours and the perceived benefits to the mentors.
- H11:* There is no significant relationship between the mentors' "self" perceptions of their behaviours and the perceived benefits to the mentors.
- H12:* There is no significant relationship between the protégés' "self" perceptions of their behaviours and the perceived benefits to the mentors.
- H13:* There is no significant relationship between the mentors' perceptions of their protégés' behaviours and the perceived benefits to the protégés.
- H14:* There is no significant relationship between the protégés' perceptions of their mentors' behaviours and the perceived benefits to the protégés.
- H15:* There is no significant relationship between the mentors' "self" perceptions of their behaviours and the perceived benefits to the protégés.
- H16:* There is no significant relationship between the protégés' "self" perceptions of their behaviours and the perceived benefits to the protégés.

Appendix 3. Semi-structured interview schedule

In June 1991, a set of questionnaires was given to each of the 27 pairs of mentors and protégés who were working together during the practicum component of the Diploma in Educational Administration (DEA) Programme. In addition to the quantitative data obtained through feedback in the survey forms, a qualitative methodology was also adopted to cross-check and add depth and richness to the quantitative approach.

The semi-structured questions as listed below will provide a better understanding on mentoring as a learning relationship, with particular reference to the personal qualities, behaviours and effects of the mentor-protégé relationship.

- (1) How would you describe your learning relationship with your mentor (or protégé)?
(Investigate – If effective, why? If not effective, why?)

- (2) In your opinion, what was it about your mentor (or protégé) that made the relationship successful (or unsuccessful)? (Investigate – in what way did it help (or not help)? Investigate further on some items on personal qualities only if necessary).
- (3) What did your mentor (or protégé) do to make the relationship successful (or unsuccessful)? (Investigate – what about him doing things without being told? What about the sharing of skills? What sort of skills? How about the way he/she related to you?)
- (4) What do you see in yourself that made the relationship successful (or unsuccessful)? Investigate along the same line as in Question 2.
- (5) What did you do to contribute to the success (or otherwise) of the relationship? Investigate along the same line as in Question 3.
- (6) What do you consider the most significant things you did that helped yourself or your mentor (or protégé) in gaining from the mentoring experience?
- (7) How could you and your mentor (or protégé) make the mentoring experience more successful? (Investigate – What would you or your mentor (or protégé) do?).
- (8) Do you see any similarities in yourself and your mentor (or protégé)? (Investigate – In what way similar? What about any differences? Did this make a difference to the relationship?).
- (9) Can you add any additional information regarding your mentoring experience?