Chapter 3: Research that informed the Development of the Online Mentoring Model

Introduction
This chapter documents an exploratory, qualitative study that informed the development of an online mentoring model for Supplemental Instruction Leaders (SILs) and in doing so contributes to addressing Research Question 1, “What models are appropriate for mentoring geographically-dispersed Supplemental Instruction Leaders?”. The term model is used to represent a theoretical design for mentoring that can be operationalised as an implementation. This chapter is divided into two sections, representing two of the four steps in the model’s development:

Step 1. Development of a conceptual model. Design variables were identified based on the literature and context of the study and an initial conceptual model was developed.

Step 2. Research to inform the development of the detailed model. Supplemental Instruction Leaders (SILs), supervisors, and online mentoring practitioners were interviewed about the model. Data from these interviews were analysed and informed the development of a more detailed model.

In Chapter 4 the research conducted to develop and review the detailed model is described under Steps 3 and 4:

Step 3. Development of the detailed model. A model is specified in terms of the design variables identified in Step 1 using the data gathered in Step 2.
Step 4. **Review of the model.** SILs and Educational Technology Specialists were interviewed about the detailed model. Data from these interviews were analysed and informed revisions of the model.

**Step 1: Development of a conceptual model**

The goal of this step was to use the literature to inform the design of the model that addressed the purpose of this study. The process involved in the successful completion of Step 1 is described under the following headings:

- The definition of mentoring chosen
- The theoretical framework for mentoring adopted
- The meaning of the term ‘model’ used in this study
- Mentoring model design variables

**The Definition of mentoring chosen**

A “lowest common denominator” (Jacobi, 1991, p. 512) definition of mentoring is used in the development of the model to avoid omitting any component of mentoring that may be excluded by a narrower definition. Jacobi arrived at this definition through a study of the literature, which aimed to produce a broad all-encompassing definition of mentoring. Jacobi defines mentoring as:

1. **Mentoring relationships are helping relationships usually focused on achievement. The primary dynamic of the mentoring relationship is the assistance and support provided to the protégé by the mentor … further the mentor does not necessarily carry the formal authority of a supervisor or teacher.**

2. **Mentoring includes any or all of three broad components: (a) emotional and psychological support, (b) direct assistance with career and professional development, and (c) role modelling.**

3. **Mentoring relationships are reciprocal relationships … to differentiate the mentoring relationship from that of a client-based relationship, it might be added here that the benefits are other than fee for service.**
4. Mentoring relationships are personal.

5. Relative to their protégés, mentors show greater experience, influence, and achievement within a particular organisation or environment.

(Jacobi, 1991, p. 513)

The theoretical framework for mentoring adopted

This model draws upon Social Learning Theory (Bandura, 1977) to explain the mentoring process and Social Exchange Theory (Homans, 1958) to explain why mentors and mentees participate in the relationship. Each of these frameworks is used to explain mentoring from both an educational and a business context (Ehrich, et al., 2001).

Social Learning Theory and Social Exchange Theory are complementary when combined into a framework to describe mentoring. While Bandura’s is focused on role modelling and learning of behaviours, Social Exchange Theory focuses on the rational decisions made by mentor and mentee in beginning, maintaining and terminating the relationship. Figure 3-1 shows how these theories combine to produce one model for understanding online mentoring.
Figure 3-1. A Combined Social Exchange Theory and Social Learning Theory Framework for Understanding Mentoring
In Figure 3-1, Social Learning Theory contributes an understanding of how behaviours are learned. As discussed in Chapter 2, for optimal learning of modelled behaviours, Social Learning Theory suggests that the following conditions should be met:

1. The observer should organise and rehearse the behaviour symbolically before enacting it overtly
2. The behaviour should result in outcomes valued by the observer
3. The observer and model should be similar
4. The model should have admired status

Conditions 1 and 2 are parts of the modelling process. They inform a response to the Figure 3-1 question “How are behaviours learned?” by suggesting an optimal role-modelling process. There is some debate in the literature about role modelling in online mentoring, for example, the Ensher, et al. (2003) suggestion that role modelling may be the most difficult component of mentoring to take online. Although overt modelling may not be possible online, other types of modelling stimuli can be provided. Bandura’s research has included multiple studies and reviews on modelling that are mediated by technology; examples include his experimental study of aggressive behaviours learned from human and cartoon television models (Bandura, et al., 1963). In his more recent theoretical review of modelling in mass communication, (Bandura, 2001) writes:

*Modelling affects the adoption of new social practices and behaviour patterns in several ways. It instructs people about new ways of thinking and behaving by informative demonstration or description. (p. 285)*

Here Bandura has written about modelling stimuli in the form of “informative demonstration” and “description” in mass media. When discussing role modelling, this research is referring to a broad meaning of the term that includes descriptions of behaviours by models, rather than restricting the term to only include overt face-to-face modelling.
Conditions three and four help to respond to the Figure 3-1 question “Who are appropriate mentors?” by suggesting that they are similar to the mentee and hold some sort of admired status. In this model’s context, similarity of mentor and mentee may come from them both being SILs, or sharing an academic major. Admired status may come from experience as a SIL or formal recognition as a mentor.

Figure 3-1 also asks the questions “Why participate in mentoring?” and “Why adopt modelled behaviours?” both of which are addressed by Social Exchange Theory. In making the decision to participate in mentoring or adopt a modelled behaviour, mentors or mentees would base their decisions around a rational cost-benefit analysis. Costs may include the time taken to participate, and benefits could include the outcomes of a newly-learned behaviour.

The meaning of the term ‘model’ used in this study

A model is an abstract and concisely written document, whereas an implementation is a practical and detailed document. Thus a mentoring model does not document details, instead it is a more general specification. For example, many mentoring models include training, as do many documentations of mentoring interventions. A mentoring model’s description of training might specify the objectives of the training, the content to be covered and the approach to be taken, whereas a documentation of an implementation of a model would include the training materials and go into more detail about the operationalisation of the training; for example, strategies, time allocations and resources may be specified.

A discussion about mentoring requires that the term be defined and the characteristics of a particular mentoring program be communicated. Some work has been done to develop terminology to communicate components of a model of mentoring. For example, Ensher, et al. (2001) used the terms “step-ahead”, “peer” and “traditional” (p. 420) to describe the comparative levels of experience of mentor and mentee. They also used other terms like “group” and “dyadic” (p. 420) mentoring to symbolize the number of people involved in a mentoring
relationship. It needs to be acknowledged that the definition of mentoring adopted and the context of a mentoring program influence choices made about the design of the various sections of the mentoring model. During this research the term ‘design variable’ is used to refer to the choices that influence the design of the mentoring model.

**Mentoring model design variables**

A survey of the literature identified 20 mentoring model design variables. Each of them is discussed below using a consistent format. Each variable is named, defined, and justified with reference to the literature.

1. **Objectives:** *a projected state of affairs that the model plans to achieve*

Mentoring models have different objectives; specifying them justifies other choices and provides evaluation criteria.

(Ehrich, et al., 2001)

2. **Roles:** *what the mentors and mentees will do; their function; who they are; and which other people are involved*

Mentoring models suggest different roles for the participants. It is necessary to know all the types of people involved in mentoring and the responsibilities of each.

(Ehrich, et al., 2001; Hawkey, 1997)

3. **Relationships:** *the number of mentors and mentees involved in a relationship; what will happen between them*

Mentoring is based around relationships, but the nature of these relationships varies between models. These relationships can be one-to-one (one mentor and one mentee); one-to-many (one mentor and many mentees); many-to-one
(many mentors and one mentee); or many-to-many (many mentors and many mentees). To appropriate a term from the fields of data relationship modelling and mathematical set theory, this can be referred to as cardinality. Another consideration in a mentoring model is the relative strength of relationship ties. Relationship tie strength considers frequency of communication, how reciprocal the relationship is, and the level of emotional affect in the relationship.


4. **Time**: *the amount and regularity of time required*

Specifying the time requirements helps clarify expectations for participants. Some models mandate set times, whereas other models are more flexible to the participants’ needs. Time influences the choice of synchronous or asynchronous technologies.

(Boyle & Boice, 1998; Feldman, 1999)

5. **Selection**: *how mentors and mentees are chosen*

Many mentoring models have criteria used to choose mentors; some extend this to mentees as well. Potential criteria include experience in an organisation or personal characteristics.

(Hale, 2000)

6. **Matching**: *the method by which mentors and mentees are assigned to relationships*

There is great variation in how matching is performed; examples include criteria-based matching and participant choice.

(Bandura, 1977; Ehrich, et al., 2001; Hale, 2000; O'Neill, et al., 2005)
7. **Activities**: *actions that mentors and mentees can perform during their relationship*

Different models involve mentors and mentees in different activities; specifying these clarifies mentoring to participants. Some potential activities include discussing work samples, troubleshooting political problems, and informal conversation.

(Raabe & Beehr, 2003; Rickard, 2004)

8. **Tools**: *technological or other artefacts available to assist mentors and mentees*

Mentoring models require varying tools; a high level specification of tools required informs the choice of actual physical tools. Online mentoring requires some sort of CMC tool. Some other examples of tools are questionnaires or observation forms that are filled out by mentors or mentees.

(O'Neill, et al., 2005)

9. **Role of technology**: *whether technology will be the only mode of communication, the main mode of communication, a supplement to other modes of communication, or not used for communication at all*

Technology can play many roles in mentoring. Specifying the role of technology clarifies the meaning of ‘online’ mentoring.

(Ensher, et al., 2003)
10. **Training:** *how necessary understandings and skills for mentoring will be developed in participants*

Some mentoring models include training about mentoring or the tools used to perform mentoring. This training is sometimes provided to mentors only and other times to mentors and mentees. Training could be ongoing throughout the model or in an intensive workshop at the start.

(Ehrich, et al., 2001; Single & Single, 2005)

11. **Marketing:** *how mentoring will be promoted to potential mentors and mentees and how they will be informed about it*

Marketing can take many forms; a model needs to specify how participants will be marketed-to on both an initial and an ongoing basis.

(Rickard, 2004)

12. **Resources:** *materials that will be provided to participants to assist them with mentoring*

Models provide different amounts and types of resources. Clarifying this makes resourcing and budgeting for the model simpler, and informs participants of the assistance that will be provided to them. Some examples of resources include reference materials or manuals, or a specified meeting place for mentoring.

(Single & Single, 2005)

13. **Expectations:** *what participants will be required, or deemed likely, to do*

Specific expectations on participants vary between models. Examples include expecting participants to report on their interactions, or make contact on a weekly basis.

(Ehrich, et al., 2001)
14. **Rewards**: *what participants will receive to compensate for their efforts*

Some models pay participants; some provide other sorts of reward. Rewards can be extrinsic, such as payment, or intrinsic, such as satisfaction from having helped a mentee. Specifying rewards is necessary to describe a model.

(Burke, et al., 1994; Kram, 1983; Ragins & Scandura, 1999; Schulz, 1995)

15. **Policy**: *a set of rules and guidelines on issues such as privacy or the use of technology*

Mentoring models vary in terms of policy. Some models don’t specify any policy whereas others have lengthy policy documents.

(Ehrich, et al., 2001; Ensher, et al., 2003)

16. **Interaction with context**: *how mentoring will impact on participants’ contexts, and how their contexts will impact on mentoring*

Mentoring models vary in how they interact with their participants’ contexts. This variable may include specifying the model’s interaction with supervision structures or how it relates to the host organisation’s administration.

(O’Neill, et al., 2005)

17. **Monitoring**: *what oversight will be performed, what actions will be taken under what circumstances, and by whom*

Some models don’t monitor participants at all, whereas others closely monitor all communications. Specifying the monitoring that will occur formalizes it to participants and the model’s coordinator.

(Ehrich, et al., 2001)
18. **Boundaries**: *a way of distinguishing between what sort of help is provided through mentoring and what is acceptable*

Some mentoring models encourage mentor and mentee to become close friends; some others encourage distance. Boundaries also assist in differentiating mentoring from other supports such as supervision.

(Raabe & Beehr, 2003; Simon & Eby, 2003)

19. **Termination**: *how relationships are ended*

Mentoring models terminate relationships in a variety of ways, with some including a “no-fault exit clause” and others having some sort of intervention by the program’s coordinators. Sometimes mentoring relationships don’t have a clear termination, whereas in other models there are procedures in place to end relationships.

(Ensher, et al., 2001; Scandura, 1998)

20. **Evaluation**: *the processes put in place for assessing the model and individual mentoring relationships*

Evaluation is important for improvement of the model, however procedures differ between models. Examples of evaluation processes include measuring participant job-based self-efficacy before and after a mentoring intervention, or surveying participants about their experiences. Some models employ research methods for evaluation.

(Single & Single, 2005)
Step 2: Research to develop the detailed model

This step of the study aims to address the design variables identified in Step 1 through consultation with SILs, SI supervisors and online mentoring practitioners. The outcomes of this step were:

- The support needs of SILs were better understood
- A detailed model of mentoring SILs was developed that addresses many of the variables identified in Step 1

Methodology

This step employed qualitative semi-structured interviews with three groups of participants: SILs, SI supervisors and online mentoring practitioners. The first two groups are actively involved with SI as practitioners, participants and researchers. As the intended users of the online mentoring model being developed, SILs are key informants to the design process. SI supervisors were interviewed, as they have an understanding of both SI and the requirements of SILs. They also are likely to influence organisational support of any program to be used by their Leaders. Interviews were analysed using a categorical aggregation approach (Creswell, 1998) to identify support needs and themes relevant to the design variables. Recruitment and participants are described separately below for each group, after which the interview schedules and analysis strategy are explained.
Recruitment and Participants

SIls

The recruitment strategy for SIL interviewees was formulated to provide a broad sample of academic disciplines (sciences or humanities), experience as a SIL (less than one year or greater than one year), and gender (male or female). All SILs to be approached knew the researcher and were to be interviewed face-to-face. They were given the option of an interviewer that was external to their SI program and the research team. The participant selection matrix shown in Table 3-1 was used to select SILs to approach about participating in interviews:

Table 3-1. Participant Selection Matrix for SILs

<table>
<thead>
<tr>
<th>Science/Maths/Computing</th>
<th>Arts/Law/Creative Arts/Commerce</th>
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<tbody>
<tr>
<td>Experience &lt; 1 year</td>
<td></td>
</tr>
<tr>
<td>1 male (recruited)</td>
<td>1 male (recruited)</td>
</tr>
<tr>
<td>1 female (recruited)</td>
<td>1 female (recruited)</td>
</tr>
<tr>
<td>Experience &gt; 1 year</td>
<td></td>
</tr>
<tr>
<td>1 male (recruited)</td>
<td>1 male (recruited)</td>
</tr>
<tr>
<td>1 female (recruited)</td>
<td>1 female (not recruited)</td>
</tr>
</tbody>
</table>

In total there were seven participants, as detailed in Table 3-1. A female experienced Arts/Law/Creative Arts/Commerce SIL was not recruited, although two were approached. One SIL also identified as a supervisor and is also counted in the next group of participants, SI Supervisors.

SI Supervisors

There were five SI supervisor participants and all knew the researcher. Recruitment was based on a strategy that provided a range of supervisor backgrounds such as years of experience as a supervisor (less than one year or greater than one year), employment as academic or general staff, and
placement within a faculty or a separate teaching and learning unit. A participant selection matrix is not provided here as it would provide identifying information about them. Interviews were conducted face-to-face or via email with optional telephone follow-up where that was not possible.

**Online Mentoring Practitioners**

Online mentoring practitioners who were known to the researcher’s supervisors or were authors of research studies in the field were also approached to participate in this research. They were interviewed either face-to-face or via email with optional telephone follow-up where that was not possible. There were three online mentoring practitioner participants.

**Interview Schedules**

Separate interview schedules were developed for each group of participants. These interview schedules are presented in Appendix 1 of this thesis. Initially questions devised by the researcher were revised based on feedback from colleagues at a faculty colloquium. The revised questions formed the draft interview schedules, trialled with one participant who had experience as a SIL and supervisor. Feedback from this participant was incorporated into the final interview schedules. The interview schedules were semi-structured, with most questions designed to provide prompts for discussion around issues rather than elicit particular responses. However some questions, such as those about the time potential mentors and mentees would be willing to commit to online mentoring, were meant to obtain specific information from interviewees.

Interview schedules, recruitment strategies and recruitment packages gained approval from the university’s Human Research Ethics Committee before potential participants were contacted. Documentation of ethics approval for this phase of the research is in Appendix 2. Four of the SI supervisors and two of the online mentoring practitioners were interviewed face-to-face, with the remainder interviewed by email. All SILs were interviewed face-to-face.
Analysis strategy

All face-to-face interview participants consented to audio recording. Transcribed audio recordings were sent to the interviewees for verification. Interviewees were invited to make any clarifications or additions to the transcriptions, and some did. After these changes were made, SIL and supervisor verified interview transcriptions were analysed using a categorical aggregation approach as the goal was to identify emerging issue-relevant meanings (Creswell, 1998). A direct interpretation (Creswell, 1998) approach was used to identify meaning from individual data points from interviews with online mentoring practitioners. These meanings were compared between participants. Direct interpretation was chosen as the participant responses were based on their own specific mentoring models and experience. Also considering each individual response provides a context for comparison.

Results

Data are reported according to the topic under discussion and the themes raised by interviewees. As SILs and supervisors were asked similar questions their responses are jointly reported to highlight points of similarity and difference. Online mentoring practitioner responses are then discussed.

For each topic the findings are organised under the main heading of topic discussed, then facilitating question(s) are presented, followed by SIL and supervisor responses. Each topic also ends with a brief summary.

SILs’ and supervisors’ ideas about the role of the SIL

To understand how SILs and supervisors viewed the role of the SIL, the following facilitating question was asked of them:

- “What do you see is the role of a PASS/SI Leader?”

SI supervisors described the role in terms of the duties and activities that they thought the Leader should do. The themes that emerged from discussions with supervisors were closely related to the role of the SIL as described in the UMKC
SI Supervisor manual. SILs provided a diverse range of responses to this question, with a focus on their duties, the desired outcomes of their role, and the meaning of their role in their life.

SI supervisors described the role of the Leader as preparing and facilitating SI sessions as well as being “a member of the SI team”. In preparing for the sessions, supervisors described their Leaders’ role as predicting where the students will encounter academic difficulties, and producing activities for the sessions that will help overcome these difficulties.

Some supervisors emphasised their view that SI exists primarily to improve students’ grades and understanding of subject content, and that other incidental benefits are appreciated but not an integral part of the role of the Leader. Some other supervisors focused more on these incidental benefits when discussing the Leader’s role. To them the development of “a sense of community” through a “positive, engaging atmosphere” in the sessions was a core responsibility of the SIL. All supervisors expressed that they hold their SILs in high regard, and for many supervisors contact with their SILs can be motivating, refreshing and inspiring.

The only supervisor interviewee who had also been an SI attendee and SIL described the SIL’s role as “helping people to learn, not so much teaching them but, more, giving them the skills to take away so that they … can construct [an SI] environment in later times”. This supervisor placed emphasis on helping students acquire transferable academic skills and on the environment that is necessary to do this effectively, describing people in the sessions as his “mates”, and making an effort to differentiate himself from a tutor. Many other SILs also expressed their interpretation of their role by relating it to the role of a university tutor. This may have been influenced by an activity conducted during their pre-service training where they were asked to identify the similarities and differences between the roles of tutors, lecturers and SILs.
One SIL who has been heavily involved with tutoring, and has concurrently been the sole SIL and sole tutor on a subject, viewed the SIL’s role as a facilitator of a different kind of discussion about subject content, saying that:

“It’s a nice intellectual/pedagogical exercise, a little lab where for a few hours per week you can test different ways of getting things across to students outside the normal tutorial activities”.

Another SIL who had run sessions on one economics statistics subject for five consecutive semesters, viewed his role in terms of one of his other roles outside university, saying that “I lead a lot of Bible study groups, usually 8-10 [people] max … I joke sometimes with my mates that [SI] is just a secular Bible study where we study stats instead of the Bible”. This Leader said that the skills and techniques required for the two roles are very similar.

SILs often mentioned student development and transition support when talking about their role. One SIL interviewee described her role as “like life coaching, but for uni”, and went on to explain that the SIL helps students develop themselves to achieve at university, particularly in terms of becoming critical, independent thinkers, as well as assisting them with developing good study habits. Another Leader said that part of her role is to help students to become confident enough to ask for help not only in the session but also outside of the SI environment.

Summary

SILs and supervisors described the SIL’s role as including the following components:

• Academic support

• Social support and community building

• Skilling students for their current and future studies
Most difficult skills and challenging situations for SILs

To develop an understanding of the skills SILs find most difficult and the situations they find most challenging, the following questions were asked of SILs and supervisors:

- “What has been the most difficult skill or responsibility for you in your role?”
- “Tell me about the most challenging situation you have found yourself in as a PASS/SI Leader?”
- “From your experiences, what skills do PASS/SI Leaders have the most trouble with?”

SILs were asked what the most difficult skill or responsibility has been for them in their role as a SIL, and SI supervisors were asked the same question relating to the SILs they supervise. In addition to this, SILs were asked about the most challenging situation they have encountered as a Leader. All skills and difficulties raised by supervisors were also mentioned by SILs, however, the SILs also mentioned many more.

One recurring SIL difficulty mentioned by supervisors was management of group dynamics. One supervisor said that “measured surrender of control to the group” is the single most difficult part of being a SIL; they need to know when to intervene in the group process and when not to. The supervisor emphasized this as both extremely important and extremely difficult. Another supervisor mentioned that involving every student as a productive group member is the most difficult part of the Leader’s role. When discussing the management of group dynamics as a difficult skill, SILs focused on involving every student as being the most difficult aspect.

Preparation for SI sessions was commonly mentioned by both Leaders and supervisors as a difficult skill to master. Leaders and supervisors identified that preparing the right amount of exercises and activities to cover is difficult, particularly for new SILs. The common solution for beginning Leaders is to
“over-prepare” and come to the sessions with more material than the Leader expects to cover. One supervisor mentioned that this is not an effective solution as it can cause disappointment for the attending students who expect to cover all the material set by the Leader when determining the agenda at the beginning of the session. Over-preparing is also time-consuming and can interfere with study commitments, which can be frustrating for SILs, who are described by their supervisors as being very conscientious, high-achieving students. Leaders who accurately judge student completion times for their activities still find preparation challenging and one very experienced Leader stated that he finds it difficult to prepare something different and original for each week of the semester. Personal time management was also identified as a related difficulty by SILs, particularly when they are revisiting and re-learning lecture content they haven’t dealt with in years, or when the content has changed.

Re-teaching occurs when the SIL tries to lecture or provide direct instruction based on their own knowledge of the subject matter. Re-teaching was mentioned by SILs and supervisors as being difficult for SILs to avoid. One SI supervisor described the challenge as “how to be seen as a competent person when students really just want you to give them the answer”. Two SILs, both with one semester of experience, mentioned this as a challenge for them. Another supervisor described the problem more as one of student expectation management, and that the Leader needs to set up an environment in which students don’t expect to be able to come to SI and just be provided with answers; instead they should expect to be actively involved in collaborative learning. A related challenge raised by one SIL is how to direct the students away from an incorrect understanding of the topic under discussion without overtly telling them that they are wrong.

SILs and supervisors mentioned session size as a challenging issue for Leaders. Small sessions, which were described as being those with fewer than five students, were considered a challenge by supervisors primarily because they can make it difficult for the Leader to effectively establish a peer-learning environment. Also with fewer students in the room there are fewer students who
may have “the answers”, and more pressure on the Leader to reteach. One SIL said that it can be difficult to motivate herself and the students when numbers are small. Large SI sessions, those of more than 30 students, were also mentioned by Leaders as challenging, as they can make “classroom management” difficult, as well as making students reluctant to talk.

Some Leaders mentioned having difficulties with international students in their SI sessions. These difficulties were related to cultural and language differences, with one Leader describing a situation in which nobody in a session could correctly pronounce a particular student’s name, creating tension. Another Leader described her efforts to ensure that she talks slowly and clearly enough to be understood by international students in her sessions while avoiding sounding patronizing, as well as her efforts to get other students in her sessions to talk in a similar way.

Development of self-confidence was mentioned by two SILs as being personally challenging but required to be a successful SIL. One SIL, with one semester of experience, said that her lack of confidence in her ability as a SIL had impacted negatively on her sessions, and that this was identified by her supervisor as an area for improvement. The other Leader to mention self-confidence as a challenge was very experienced as a SIL but still found it “nerve-wracking” at the start of each session.

Overly-dominant “know it all” students were mentioned by SILs as difficult to deal with in their sessions. These students can leave other students feeling intimidated and not wanting to get involved or challenge the overly-dominant student. One leader described a particularly challenging situation in which an intoxicated student dominated the session. The leader said that the student was intoxicated enough to have both a very reduced understanding of the subject matter and a very increased confidence in his understanding of the subject matter.

SILs and supervisors mentioned that SILs and students need to have confidence in the SI model. One SIL described a situation in which he had
difficulty with a student who was openly challenging the SI model’s ability to help her learn the subject matter. The student claimed that by explaining her understanding of the content to another student and having it challenged by the group she had become confused and less knowledgeable. Another SIL described her own lack of confidence that the SI model would work on her subject when she commenced, as she hadn’t seen it applied there before. One of the supervisors identified a lack of confidence in the SI model as being an indicator that someone may not be suited to being a leader, and that if this was an issue during training then they probably wouldn’t be offered employment.

Other themes mentioned by SILs included believing that students in the group are actually gaining something from the session, making the session enjoyable, and retaining students. These themes were mentioned by the SI supervisor who was also a SIL and participant, and they were said to be linked. He said that he tells SILs that to retain students they need to be getting something out of attending, and that it has to be enjoyable, with the implication being that if students do keep attending then they must be enjoying themselves and gaining something from the session.

Summary

SILs and supervisors said that the following were the most difficult skills or the most challenging situations for SILs:

- Managing group dynamics and involving every student
- Preparing for sessions
- Avoiding ‘re-teaching’ subject matter
- Dealing with different session sizes
- Specific student types or characteristics, including dominant students or international students
- Self-confidence and confidence in the SI model
Skills development for SILs

To understand how SILs develop the skills they described as difficult, SILs and supervisors were asked the following questions:

- “How do they develop these skills?”
- “How have you developed [these skills]?”

While discussing the most difficult skills and challenging situations facing SILs, they were asked about how they developed their skills, and how they developed strategies to deal with the challenging situations they mentioned. SI supervisors were asked how their leaders develop the skills they mentioned as difficult. Supervisors most commonly mentioned the feedback they provide, with training, meetings with other SILs and a SIL manual also being mentioned often by most supervisor interviewees. SILs most commonly mentioned discussion with their peers, self-analysis and experience or “trial and error”.

When talking about their role in the skills development of SILs, most talked about providing feedback based on the performance of the leader in a formal observation of a session. One supervisor regarded this sort of feedback as the single most important method of skills development, saying that without it leaders “fumble through and might learn some of the things by the time they are finished, but it is by trial and error”. His view was that feedback accelerates skill acquisition dramatically when compared with relying solely on experiential learning. Two SILs identified “trial and error” as a way they developed their skills. The same supervisor also mentioned self-assessment as being an important part of the debriefing after a formal observation.

One supervisor thought the formal observations may be considered “intimidating” to the SIL, particularly in the first few weeks of the semester. This supervisor encouraged leaders to perform peer reviews of each other’s sessions both to prepare for the formal supervisor observation and as a way to improve the sessions. The supervisor who had also been a SIL and participant did not mention personally finding the reviews intimidating, but did describe his
approach when conducting the reviews as very tentative and non-authoritarian. He said that he presented his feedback as suggestions rather than criticism, and prefaced them by telling the leader that they are things he has learned that worked for him rather than rules or corrections. His observations of a leader would continue until he was happy with what the leader was doing.

SI supervisors considered issues of both pre-service and in-service training when they discussed skills development. Pre-service typically lasted for two days, and two supervisors mentioned having changed the delivery method of the training to be a facilitated session in which SI skills are modelled by the supervisor, while keeping the content of the training the same as the UMKC training suggestions. Some supervisors mentioned in-service training and one supervisor described professional development workshops that focused on specific topics, such as “assertive communication”, “intercultural communication” or “how to conduct peer reviews of SI sessions”. Other supervisors described semi-formal meetings with other SILs, facilitated by either the supervisor or a SIL, as an in-service training opportunity. The frequency of these meetings varied between weekly and a few times a semester.

Payment for participating in in-service training and meetings was raised as an issue by one supervisor, who held the view that leaders must be paid for compulsory in-service training. Contrasting with this, one supervisor said that their leaders were paid only for the SI sessions they facilitate and nothing else. Both supervisors said their leaders were required to participate in weekly meetings and prepare for their sessions.

Some supervisors mentioned a SIL manual, which was typically developed in-house or adapted from existing materials such as the UOW or UMKC manuals. One supervisor said that SILs are referred to the manual when they have problems as it contains a lot of resources and tips that work, but that they don’t use it frequently. No SIL that was interviewed mentioned a SIL manual, except the SIL who was also a supervisor.
SILs commonly said that they discussed difficult situations or skills with their peers, who were sometimes fellow leaders on the same subject, and other times leaders met during pre-service training or around campus. Leaders said that they would discuss things like difficult students or their preparation strategies for the coming week. These discussions were described as casual and informal by the leaders, and would often occur as leaders walked from class to class or when they were in the SI office. One SIL said that this was difficult to do if you were the only SIL on a subject, particularly as they were supporting an academic discipline that had previously not been supported by SI. They felt that such a situation posed some unique challenges that would best be addressed by someone from the same disciplinary background.

Self-analysis and reflection was commonly used by SILs for skills development. This was typically described as looking at what worked in the session and what didn’t and trying to do more of what worked. Self-analysis was used by SILs who reported being the only leader on their subject as well as those who were working with other leaders on the same subject. The technique was used by both new and experienced leaders. One leader described eliciting student feedback on her sessions as a way to help her own self-analysis.

Most SILs mentioned talking with their supervisors as a method of skills development. They said that these talks would sometimes occur after formal quality assurance checks; at other times the SIL would talk with the supervisor about difficult problems they were having when they were dealing with administrative duties in the SI office. One leader described this second type of discussion as “constant analysis of what is going on at a casual, low level”; as the only SIL on a subject this was a very useful support for him.

One less-commonly-mentioned method of developing skills was discussion with subject lecturers. This was mentioned by leaders who were on subjects that didn’t have a history of SI support at their university, and was mostly about developing preparation skills. Another SIL who was reassigned to a different discipline described reviewing previous SI material for the subject he was
newly-attached to, with the goal of trying to understand how to structure the session and how to ask questions about the content. This SIL also talked about using online resources, such as “MIT Open Courseware”, as source material to help him develop his preparation skills.

Summary

When discussing how SILs developed skills, the SILs and supervisors mentioned the following methods or sources of development:

- Feedback from formal observations, which was appreciated but thought to be intimidating by some interviewees
- Trial and error, which was regarded as less preferable than feedback
- Training, both pre-service and in-service
- A manual was mentioned by supervisors, although some suspected that it was not used often
- Discussion with supervisors or academics
- Self-analysis and discussion with other SILs
- Online resources

Supports available to SILs

To understand the support mechanisms that currently exist, SILs and supervisors were asked one of the following facilitating questions:

- “What support do you receive in your role as a PASS/SI Leader?”
- “What supports do your PASS/SI Leaders have access to?”

When asked about the supports available to their SILs, most supervisors said that SILs receive a lot of support. When discussing specific supports available to their leaders the most common responses mentioned assessments by more senior SILs, assessments by supervisors, social get-togethers and “open-door” or “drop-in” support from supervisors or office staff. SIL responses almost
unanimously mentioned “open-door” or “drop-in” support. Other common supports mentioned were informal meetings with other SILs, support from family and friends and administrative support. Three SIL respondents said that they thought there was a lot of support.

Always available, “open-door” or “drop-in” support was mentioned by a large majority of SILs as a support they appreciated, and was mentioned by two supervisors as a support available to their leaders. The researcher who was conducting the interviews has in the past provided this sort of support to some of the interviewees, including most of those who mentioned this theme. One supervisor described this support as mostly being about reassurance and maintaining contact. Frequency of use of this support was typically one or two times per week, and typically occurred when leaders were preparing for their sessions or performing their necessary administrative duties. One leader who has been the only SIL on the subjects he led for most semesters said “… as irritating as it is, having to hand in the attendance sheets every week is a useful support. It doesn’t even need to be thought of as support, more a constant connection with the [SI] office”. This leader said that he values “constant contact with somebody”, and that he appreciated the opportunity to talk. One SIL said that although she didn’t use the contact with people in the office as “support”, it was supportive to know that it was there. The presence in the office of administrative staff who were experienced SILs gave the support a “student touch” that was appreciated by one SIL. Only supervisors who had SI as the majority of their role mentioned providing “open-door” support. One supervisor for whom SI was not their main focus was the only supervisor to mention some sort of scheduled one-to-one support.

Formal assessments by supervisors were mentioned by both SILs and SI supervisors when discussing support. Assessments or “peer review” by other leaders, who were sometimes called “mentors” or “supervisors” was also commonly mentioned. Formal training for leaders on conducting assessments of their fellow leaders’ sessions was mentioned by one supervisor. Reported regularity of SIL assessment by supervisor or experienced SIL varied greatly.
Two supervisors said that SILs should have someone supervising every session, every week for their first semester, whereas some other supervisors saw intensive support in the first few weeks of semester as being most important.

Some SILs and supervisors said that formal assessment of sessions, particularly in the early weeks of semester, can be daunting for the leader and change the group dynamics. One leader suggested that the debriefing process after sessions should be less formal, and thought that the use of a formal assessment tool was not helpful. This leader said that he would prefer informal mentoring, including session evaluation, to be provided by a more experienced leader. Another leader described receiving formal mentoring, which included assessment of sessions, from an experienced ex-leader on the subject to which she was attached. She described her mentor as “just lovely” and very skilled at giving feedback. This leader said she rarely received negative feedback from her mentor, but was confident that if her mentor had a concern she would raise it with her.

Most leaders mentioned receiving informal support from their fellow leaders. For some leaders this would take place accidentally while walking to class on campus, or in the SI office. One leader described having a weekly dinner meeting with a fellow leader for the duration of their first semester. Formal, scheduled meetings were also mentioned by both leaders and supervisors. One leader mentioned appreciating formal meetings with all leaders, and talked about delivering a seminar to one meeting about re-teaching. Another leader said that in his first semester, a more senior leader was assigned the task of scheduling a formal meeting with all leaders on his discipline, and that this was initially comforting:

_There was a reassurance when I started that, three weeks time we’ll get all together and have a chat about how its going and I thought, that’s cool, in three weeks time we’ll all be able to get together and I’ll say what_
I’m having problems with and what went well, and then the more experienced leaders are going to give me some help.

Unfortunately that meeting did not happen, which the beginning leader said left him feeling “as though I was left in the dark … there was this promise of senior leaders helping me out and it never really eventuated, I don’t know why but it never really did”. This leader said that there needs to be more leader-to-leader contact, and went on to say that although the fellow leaders are colleagues, it doesn’t feel that way.

Some leaders said that they receive support from family and friends. For one leader this took the form of help with preparation from a relative who is a school teacher, for another it was having family and friends who were encouraging and helpful with pre-session nerves.

Help with administration was mentioned by two SILs as being a component of the support they receive. These leaders mentioned “behind the scenes” support such as timetabling, and having a space with IT resources as things that help them with their job. One of these leaders said that the leader’s role would be too much if they were required to do the behind-the-scenes administrative tasks.

One long-term leader who had been the only leader on a subject also felt supported by the recruitment of an additional leader to deal with problems of session overcrowding.

SI supervisors identified social events as part of the support offered to leaders; these events may take the form of a BBQ breakfast before a planning meeting, or an afternoon tea afterwards to celebrate a successful semester. Post-SI support of leaders was also mentioned by two supervisors, which included some sort of ceremony for leaders to acknowledge their contribution, and acting as a referee for leaders applying for jobs.

Some SILs said that they received support from teaching staff on the subjects they were attached to. This was said to vary from semester to semester, as the teaching staff attached to SI subjects would change. The support received from
teaching staff was largely based on help with preparation for sessions, with some teaching staff offering to review preparation work for leaders. One leader said that the lecturer on the SI-attached subject took the leaders on that subject out to lunch at the end of the semester to show her appreciation of their efforts.

SIL support-seeking behaviours varied greatly; one supervisor said that leaders are happy to work on their own and seek help when they require it, whereas others like being part of the “SI team”. Those SILs who did describe their support-seeking behaviours mentioned either being “pro-active” in seeking support, or being aware that the support existed or appreciating it but not using it. Leader attitudes to support varied; it was not uncommon to find a leader who appreciated and used one sort of support but acknowledged the existence of another support and said it wasn’t required for them. An example was an experienced leader who appreciated the open-door, drop-in support from the SI office but also mentioned informal meetings with other leaders as a support he never had to use but was “comforted that they were there”. One supervisor said that the support needed was related to the leader’s “personality type”, and that this can influence how satisfying it is to be the only leader at a satellite campus, or the only one on a particular subject. This supervisor said that when supporting SILs on satellite campuses a combination of email and phone support was used successfully.

Summary

According to the SILs and supervisors interviewed, SILs receive a variety of support, including:

- Assessments by supervisors, senior SILs or other staff
- Open-door or drop-in support
- Informal meetings with other SILs
- Support from family, friends, and academics
• Administrative and IT support
• Social events

Some said that they receive a large amount of support, although one SIL commented on the importance of delivering the support that is promised.

Reasons for wanting to be a SIL

To understand why students choose to become SILs, supervisors and SILs were each asked one of the following questions:

• Why do you choose to be a PASS/SI Leader?
• Why do you think your PASS/SI Leaders choose to take on that role?

They were prompted to provide responses relating both to the initial decision to be a leader and the ongoing decision to stay involved. Themes mentioned by supervisors formed a subset of the more diverse set of themes mentioned by leaders. Two themes commonly mentioned by SILs and supervisors were personal and professional development, as well as money. Many leaders and supervisors also mentioned personal satisfaction, a desire to give something back to their university and a chance to revisit subject content.

Professional and personal development was described in different ways by different interviewees. One leader said that it is more of a facilitative role than a teaching role and the skills gained are “more social than pedagogical”. This may be reflected in the responses from supervisors and other leaders, as their responses did not describe the personal or professional development in terms of teaching skills, although one leader did say that she originally joined SI to use it as a stepping-stone to becoming a university tutor. Communication skills and self-confidence were themes common among supervisor and leader responses, with supervisors also mentioning leadership skills. Leaders additionally mentioned the development of organisational skills and the “ability to think on my feet”. The leader who ran the Bible study groups said that he found that both roles use and develop the same sorts of skills.
Money was also a major motivator mentioned by SILs and supervisors. The SIL’s job was differentiated from other student jobs by the “high hourly rate”, which for the interviewed leaders would have been roughly 50% more than other student jobs in retail or hospitality. It was also differentiated as being a more fulfilling way to earn a student income than “waiting on tables”. One interviewee said that the researcher conducting the interviews, who also sent out SIL recruitment emails to students, must view money as an important motivator as it is one of the first things mentioned in the recruitment emails.

Money was a motivator mentioned by supervisors at both high-paying and low-paying institutions, which is interesting given the variance in pay between these categories. A leader at a higher-paying institution would be likely to earn more than five times the amount a leader at a lower-paying institution would over the course of a semester. Payment varied in terms of both the hourly rate and the hours leaders were paid to work, as well as the hours leaders were expected to work unpaid.

Supervisors said that their leaders gained a sense of satisfaction from their role, and this was also commonly mentioned by leaders. Leaders said that this sense of satisfaction came from many things, including retaining students, believing that the students were being helped academically and that the leader was helping with transition issues. Two leaders said that they are SILs “because I’m good at it” or “because I’m good at what I do and I like being good at what I do”. An associated theme was “the desire to give something back”, which was mentioned by supervisors and leaders.

SI leaders and supervisors mentioned that leaders get a chance to revisit subject content they may not have dealt with since they studied the subject they are attached to. For science-based SI leaders this was described as a chance to relearn content they may have forgotten, whereas some humanities-based leaders said that SI gives them the opportunity to hear different views on the subject matter presented by students. Some leaders reported a deeper level of understanding of the subject matter they are covering.
Two SILs mentioned that they attended SI as students and that this was part of their motivation for wanting to be a SIL. Both of these leaders said that they enjoyed attending as students, and one said that when she attended she thought, “I could do a better job than that”. They were also the only leaders that mentioned their belief and confidence in the SI model was a motivator for wanting to be a SIL. SI supervisors mentioned that some leaders have wanted to become involved after attending as students, or because of the reputation of SI at their institution. One leader said that he thought the benefits for leaders are greater than the benefits for students.

Most SILs said that they choose to continue to be SILs because they enjoy it. In addition to enjoying the role some leaders said that they found it interesting. For some leaders, the role itself was interesting, whereas for others the new way of covering content about a subject they liked was interesting. One supervisor also said that she thought that her leaders want to be SILs because it provides them with the chance to stay involved with the learning and teaching of subject content that they love.

Some leaders mentioned “resume building” as one motivation for wanting to be a SIL. They believed that being a SIL would be a positive contributor to their employability when they graduated. Some other reasons mentioned were it was part of a plan to become a university tutor, and the desire to have a credible university referee who knows them on a personal and professional level.

Two SILs said that one of the reasons they choose to continue with the role is the level of freedom and creativity it allows them when helping students learn. One of these leaders has had many semesters of experience as a university tutor but chooses to stay with SI because it allows a different way of looking at the content.

SI leaders and supervisors said that the friendships developed by leaders can be motivating factors. These friendships are typically with their students or fellow leaders. One leader said that SI allowed him to form relationships with different sorts of students to those he was usually involved with in his study, as
the subject he was attached to was a service subject for students from another faculty.

Summary

SILs and supervisors said that they or their leaders chose to be SILs for a variety of reasons, including:

- Personal or professional development and resume building
- Payment
- Satisfaction or a desire to ‘give back’
- The freedom and creativity they are allowed in the role
- The chance they are given to revisit content
- Friendships they form with students and other SILs

Reasons for SILs ending their involvement with SI

To understand the reasons some SILs choose to resign from their work with SI, supervisors were asked the following question:

- “From your experience, why do some PASS/SI Leaders choose to discontinue their involvement?”

All supervisors said that discontinuation was rare, and that retention of SILs was very high, with most leaving when they graduate or are no longer eligible to be SILs. Time was mentioned by every supervisor as a factor that can contribute to leaders leaving, and many commented that in their experience it is the main factor. Other factors generally related to personal suitability to the role.

Time commitments were identified as the main reason leaders may choose to leave. As high-achieving students themselves, leaders have their own study commitments, and one supervisor said that leaders who don’t need the payment prefer to spend all of their time on their studies. Some supervisors said that time commitments were particularly pressing for leaders in the honours
year of their degrees. Some leaders move on to become university tutors and may not have the time to commit to SI any more. One supervisor said that although she is sad to see them go, she is happy that the faculty gained an excellent tutor. One supervisor said that, hypothetically, not having access to adequate resources or support could make a leader consider that their role was too demanding and “not worth the hassle”.

Some supervisors mentioned issues of personal suitability when discussing why leaders leave SI. One supervisor had leaders leave because they did not feel able to achieve what was expected of them. Other leaders left after not being able to follow the SI model despite regular feedback and help from the supervisor. One supervisor said that some SILs leave because they are not personally suited to the role; they may be too dominant or lack a sufficient amount of self-confidence.

**Summary**

Time and personal suitability were the main reasons that supervisors gave for SILs leaving their role, although they all said that it was rare that their leaders would leave the role before they graduated or were no longer eligible.

**Desirable qualities of a supporter for SILs**

To understand what sort of person would be an ideal supporter for SILs, supervisors and SILs were asked one of the following questions:

- “Describe in as much detail as possible the ideal person to help you in your role as a PASS/SI Leader”

- “Describe in as much detail as possible the ideal person to help your PASS/SI Leaders”

The term ‘person to help’ was used in this part of the interviews to elicit a broader range of responses than the term mentor might provide, as SI programs already implement a variety of support schemes. Supervisors most commonly mentioned an understanding of the SI model, experience as a SIL
and empathy as the qualities a supporter for SILs would have. Leaders described a person who was approachable, friendly, skilled in giving feedback, flexible and responsive. Leader responses varied about the importance of understanding subject content.

Most SI supervisors regarded an understanding of the SI model, or experience as a leader as important for a supporter for SILs. Supervisors said that understanding of the SI model was indicated by the quality of the leader’s sessions. Most SILs interviewed indicated that experience as a SIL was either necessary or desirable. It was more important that the supporter understands the needs of the SIL, or be interested in discussing “the philosophy of SI and education”. Those leaders and supervisors who mentioned an amount of experience said that two semesters of experience would be ideal.

The most commonly-mentioned desirable personal qualities for a supporter for SILs were empathy – mentioned by supervisors, and being approachable and friendly – mentioned by SILs. Self-confidence, confidence in others, a sense of humour, a non-authoritarian approach and humility were other qualities mentioned by supervisors. A common theme in the responses of leaders and supervisors is that the supporter needs to be able to form a connection with the person they are supporting.

Skill in giving feedback was mentioned by most SILs and one supervisor as a requirement of a supporter of leaders. A leader who currently receives mentoring support described her existing mentor as being skilled at giving feedback, specifically in providing what she called a “compliment sandwich” of positive feedback, negative feedback and positive feedback. The supervisor who mentioned skill in providing feedback as a desirable skill was at the time preparing for a professional development workshop for SILs on this issue in collaboration with the university’s tutor training staff. One leader said that he wanted someone who was “interested in dissecting, analysing what went on in each session, understanding why various things happen”. Skill in giving
feedback and identifying areas for feedback was mentioned by more and less-experienced SILs.

SILs said that flexibility in contact times and methods was desirable in a supporter, as was a high degree of responsiveness. One leader said that she prepares for all of her weekly sessions on a Sunday night, and that contact with a support person would be most helpful then. She also said that if she had a problem with how her plan went in the session that she’d want to discuss it that night with a support person so that she could implement the improvements for her sessions later that week. Leaders mentioned that dedication was considered desirable for a support person. One leader stated that it is important that the leader and supporter are equally dedicated to the relationship.

One SIL said that the support person needed to be highly-competent in the subject matter as the leader could then discuss their session preparation materials with them. Another two SILs said that it was preferable for the support person to have content expertise, but that this was not absolutely necessary. The three SILs who mentioned content expertise also said this may result in the support person having an understanding of the sorts of people that would be present in the sessions.

One supervisor and two leaders said that it would be useful but not essential to have a subject matter expert on call, and that this could be a different person from the main support person. By way of contrast, three SILs said that the supporter’s understanding of subject content was not important, that SILs themselves are deemed competent in the content, and the role of the support person should be to help with SI rather than with content.

One supervisor said that a support person for her leaders would often be someone who just wanted more work. She said that the ideal support person for a SIL is another SIL; in describing her ideal support person she said that “it’s a skill set they seem to come with”. One SIL said that her ideal support person would be a combination of all the existing support people “all rolled into one”.
Summary

SILs and supervisors thought that someone to support SILs should be:

- Knowledgeable about the SI model
- Experienced as a SIL
- Empathetic
- Approachable and friendly
- Skilled in giving feedback
- Flexible and responsive

There was some disagreement about the importance of an understanding of disciplinary subject matter.

Desirable attributes of a support relationship between SILs

To understand how SILs and supervisors envisaged a support relationship for SILs, each was asked one of the following questions:

- “Describe the ideal supportive relationship for your PASS/SI Leaders”
- “Describe the ideal supportive relationship for you as a PASS/SI Leader”

For leaders, the most commonly-mentioned themes were that the supporter acts as a critical friend and that they are in contact regularly, with other aspects of the ideal support relationship varying from leader to leader. The lack of common responses indicates that supervisors had diverse opinions about the ideal support relationship.

Three SILs described the supporter’s role as a critical relationship built on a basis of friendship. One leader said that not everyone would be able to do this, that some people can’t give constructive criticism to their friends. Leaders who mentioned this theme expressed the view that both components of a critical friendship were necessary for a support relationship.
Leaders expressed the view that a support relationship should take place on a regular basis, and one Leader suggested weekly meetings. One leader said that the relationship should be more intensive at the start of the semester and taper off as the semester goes on to let the leader “run their own show”. This leader said that the relationship should still continue throughout the semester to prevent complacency in the supported Leader. The theme of less support later in the relationship was also mentioned by one supervisor, who said that an ideal support relationship involved contact on a weekly basis for the first semester and less contact for the second semester, to allow the supported Leader freedom and autonomy.

Two SILs said that they would prefer face-to-face support if this sort of support was available, rather than online-only support. These leaders said that they prefer the personal sort of relationship allowed by face-to-face contact and prefer not to use email or other online support.

Some supervisors and leaders discussed the structure and content of communications between the supporter and the supported Leader. For one supervisor, an ideal support relationship involved regular contacts beginning with some sort of general discussion, but with little unstructured time, and a positive, encouraging critique of the leader’s sessions. The discussion would then focus on session planning. This supervisor said that structure and clearly-defined objectives were vital to the success of the support relationship. Aspects of the content of communications between leader and supporter mentioned by leaders included guidance, discussion of strategies to use in sessions, and dealing with difficult problems encountered by the leader. One supervisor said that each meeting would be run like a miniature SI session, in that it would be facilitated by the supporter but not dominated by them; this supervisor was describing meetings of around three or four SILs, with serious problems dealt with one-to-one. One other supervisor said that the ideal support relationship would be dyadic.
One supervisor described the ideal support relationship as one built on respect and constructive feedback, with another supervisor adding that the supporter would provide “pastoral” support to make the leader feel “one of the group”. One leader described the relationship in detail as being centred on the common experience of “being a [SIL]”. For this leader it was important that the supporter was seen as more of a peer than a supervisor to the supported leader. Another leader said that he considers that the relationship should be initiated by the supporter, rather than the supported leader. He said that were he the supported leader, he would be unlikely to initiate contact and ask for help, but would appreciate his supporter offering it.

Summary

SILs and supervisors had diverse ideas about an ideal support relationship for SILs. There were two common components of their ideal relationship:

- Critical friendship
- Regular contact

There was a variety of ideas about the number of people in the relationship and the sort of support that the relationship would provide.

Time commitment to online mentoring

To understand how much time SILs would be willing to commit to an online mentoring relationship, the following questions were asked:

- As a potential mentee, how much time would you want to commit to an online mentoring relationship, and how often?
- As a potential mentor, how much time would you want to commit to an online mentoring relationship, and how often?
- How much time would you anticipate your PASS/SI Leaders would be willing to commit to an online mentoring relationship?
Responses to these questions usually mentioned that time commitment would depend on the specifics of the relationship, and that issues such as technology, structure, and the benefits available to participants would be critical. Supervisors said that their leaders would most likely be able to spend between one and two hours per week on online mentoring. Responses from leaders ranged from 15 minutes per week to an hour or two per day. The time of day that leaders said that they would participate in online mentoring varied, but it would have to avoid clashes with their classes.

Two main categories emerged from discussions with SILs about time commitment to online mentoring. Four SILs said that they would be willing to spend thirty minutes per week, or less as a mentee, in an online mentoring relationship, with three of these leaders saying that they would be willing to spend at least double that amount of time as a mentor. The remaining three leaders fell into a second category and were willing to spend an hour or more per week on online mentoring as a mentee or mentor, with one saying that he would be willing to commit an hour or two each day. The three leaders in the second category had academic backgrounds in technical fields and were all male, whereas the first category had no leaders with technical backgrounds and contained a mix of the genders.

Some SILs and supervisors talked about the time of day and week that online mentoring would be used. One supervisor said that it would be best “after hours” to avoid clashes with classes; this opinion was also held by two leaders, but most leaders gave no specific indication about when they would participate in online mentoring. For example one leader said she would be most likely to participate in online mentoring before her weekly preparation, and apart from that she would participate every four or five days. Her reasons were to allow time for enough online discussion to occur and to dedicate sufficient time to make a well thought-out contribution. One leader and one supervisor said that they would favour more contact at the start of semester, tapering off towards the end of the semester. Another leader said that he checks many blogs and
discussion forums each day already and would add online mentoring to his Internet surfing routine.

**Summary**

A variety of levels of time commitment was indicated by SILs and supervisors, who were often presented with the caveat that the commitment would depend on the specifics of the relationship and its benefits. The median time commitment reported by SILs was half an hour per week.

**Benefits required of an online mentoring relationship**

To understand the benefits that would be required to make an online mentoring relationship worthwhile, SILs and supervisors were each asked one of the following questions:

- “What benefits would be required to make an online mentoring scheme worth the time and effort of participation for your PASS/SI Leaders?”

- “What benefits would be required to make an online mentoring scheme worth the time and effort of participation?”

A range of required benefits was mentioned, some pertinent to the mentor and others to the mentee. Payment was mentioned by many interviewees, but others said that was either preferable or not an issue. Seeing improvement as a result of the mentee leader’s sessions was identified as important for both mentor and mentee. Other common requirements were a meaningful mentoring relationship in which the mentee felt supported and there was some sort of recognition for the mentor.

Opinions on payment varied greatly, with supervisors generally viewing it as either required or preferred, but leaders had a broader range of views. One leader viewed payment as required and said that this is in keeping with the structure of SI, saying that “when everybody wants a piece of your time its good if you get paid for some of it”. Another leader said that if the benefits weren’t clear to the participants but the SI program required them to be part of it, then
payment would be important, even if it was at a half-time pay rate. Another leader said that the importance of payment would depend on the level of commitment expected, with mentoring one or two people for up to an hour per week in total not requiring payment, but for mentoring 10 people payment would be required. This leader also said that other sorts of material rewards would work, such as coffee vouchers. Some leaders took an altruistic view of mentoring, saying that seeing the mentee improve would “surpass any material benefits”, that quality would be more important than payment, and that the mentor’s role could be seen as volunteering. One leader said that the importance of payment would “vary from person to person” and that it “would not be the best way to get people involved”.

Improvements in the mentee’s sessions were mentioned by SILs and supervisors. Leaders expected that this would result in better student numbers, and improved confidence as a SIL for the mentee. One Leader said that as a mentor this would indicate “that I'm good at what I do, and it is important for me to be good at what I do”.

The development of a meaningful relationship was mentioned by supervisors and leaders as a requirement of an online mentoring relationship. Components of a meaningful relationship included the development of rapport, the mentor feeling they are actually assisting the mentee, and both parties believing the other is dedicated to the relationship. Leaders also mentioned guidance, feedback and personal interaction as part of a meaningful relationship. One leader said that he would be much more likely to participate in online mentoring than he would be to use “generic answers, pre-set articles or video files”. This leader said that the prospect of contact with SILs from around the world was exciting.

Some leaders and supervisors said that the mentee needs to feel supported but should not feel that they are receiving extra help because they are considered incompetent as a leader.
Recognition was considered as an important benefit of an online mentoring relationship, particularly for the mentor. Recognition could take the form of a certificate, a line in the mentor’s resume, or a mention on the university’s website. One leader said that sufficient recognition could take the place of payment, particularly for mentors who aspire to move into management-related graduate positions.

Summary

SILs and supervisors gave a range of opinions about the importance of payment for mentors. In addition, they mentioned a variety of benefits for mentors and mentees, including

- Improvement in sessions
- A meaningful relationship
- Recognition for the mentor

Barriers to online mentoring

To understand the potential barriers that may prevent SILs from being involved with online mentoring, the following questions were asked:

- “What barriers exist that would prevent you or other PASS/SI Leaders from participating in online mentoring?”
- “What barriers exist that would prevent your PASS/SI Leaders from participating in online mentoring?”
- “What barriers exist that may prevent your organisation from supporting an online mentoring program?”

Leaders and supervisors were asked about the barriers that might prevent SILs participating in online mentoring, and supervisors were also asked to identify the barriers to organisational support of online mentoring. Time and technology-related issues were the most common barriers raised by leaders. Two supervisors said that while they would support online mentoring for SILs, it
wouldn’t work in their context because face-to-face support is possible. Cost, in terms of paying mentors and mentees, as well as paying for any required technology, was also identified as a concern by supervisors. One supervisor said for online mentoring to work it would need to be implemented within the budget of the SI program as a whole.

Leaders and supervisors mentioned access to technology as a potential barrier to online mentoring. One leader said that he used to live in a small rural town and commute to university, and that online mentoring “would have been difficult … I didn’t have broadband at the time because there was no broadband where I was living”. Ease of use of the technology, as well as any lack of computer-usage skills on the part of mentors and mentees was seen as another technology-related potential barrier. One supervisor and one leader mentioned that they perceive online communications to be impersonal. The leader said that an initial meeting would overcome this problem and help him perceive the other mentors and mentees as real people.

Monitoring, supervision, quality assurance, the potential for misuse, and privacy concerns were mentioned as potential barriers by one supervisor. This supervisor said that if something inappropriate happens within current face-to-face support relationships then it is recognised quickly, but with online mentoring that would be more difficult. One leader mentioned that poor mentor-mentee matching would be a barrier to online mentoring, and that expectations would need to be mutually understood and accepted by both parties.

Lack of a clear understanding of the benefits to the organisation and to the participating leaders was mentioned by one supervisor as a potential barrier to organisational support of online mentoring. This supervisor said that their organisation is typically very supportive of the use of educational technology as long as there is a sound pedagogical purpose for it; a “gadgets for the sake of gadgets” approach would be a significant barrier to organisational support. One SI supervisor said that an online mentoring program would be most likely to receive organisational support if it was presented as a complete package,
containing “guidelines, frameworks for implementation and evaluation, and an integrated approach including software”, with ease of reimplementation also being important.

**Summary**

The main barriers to participation and organisational support mentioned by SILs and supervisors were:

- Time
- Technology-related
- The potential for face-to-face mentoring, which they considered preferable to online support
- Cost
- The potential for misuse or poor-quality relationships
- A lack of understanding of the potential benefits

**Availability and use of online communities and IT resources for SILs**

To understand SIL use of technology to participate in online communities and create digital media, and the availability of technologies to do these tasks, the following questions were asked:

- “What computing facilities do your PASS/SI Leaders have access to on campus?”
- “Tell me about the online communities that you participate in, what was their focus?”
- “What systems did [those communities] use?”
- “What experience do you have with viewing or creating digital video?”

SI supervisors were asked about the IT resources available to their leaders, and leaders were asked about their involvement with online communities and their
experience with creating and viewing digital media. Three SI supervisors mentioned that their institution provides IT resources specifically for leaders, while others mentioned general on-campus facilities such as computer laboratories, video conferencing and wireless Internet access.

When discussing their involvement with online communities, almost all leaders mentioned their university’s learning management system. Most leaders described themselves as rare or infrequent posters on this system, with some saying that they prefer to email their lecturers or tutors directly rather than participate in the community. Three leaders said that they have recreational involvement with special-interest web forums. One leader said that she enjoys using social networking sites but has identified that “these sites can waste a lot of time, so I restrict my use of them”.

Four of the SILs interviewed had experience creating digital video, which ranged from digitising home movies to filming and editing a documentary for distribution at university and online. One of the SILs interviewed had experience creating computer games for school students using educational technology tools. One leader said she had no experience with creating or viewing any digital video, and limited experience with the Internet, whereas another leader said he had extensive experience viewing content but none with content creation.

**Summary**

Supervisors and SILs reported access to computers and the Internet through on-campus facilities. All SILs reported using their university’s Learning Management System (LMS), however most were only rare or infrequent contributors. Most SILs reported being involved with digital video creation or recreational online communities.

**Summary of analysis of SIL and supervisor interviews**

SILs and supervisors described the SIL’s role as one of providing academic support, social support and community building for their students. They also mentioned that the SIL prepares students for their future studies and for
establishing their own study groups. Managing group dynamics, involving students and preparing for sessions were identified as difficult or challenging for SILs. Avoiding re-teaching content to students was also a challenge, as was dealing with different-sized groups of students. Specific types and characteristics of students were identified as difficult for SILs to relate to in their sessions. Interviewees also indicated that some SILs have problems with self-confidence and confidence in the SI model.

When discussing how SILs develop their skills, many interviewees mentioned feedback from formal observations, although others said this had the potential to be intimidating. Some skills development occurs through trial and error, although this was regarded as being less preferable than feedback. Self-analysis and discussion with other SILs was also mentioned, and was accompanied by training and a manual. Some SILs sought online resources, their supervisor or academic staff to further their skills development. SILs receive a variety of support, including formal observations of their sessions and informal face-to-face meetings.

Students choose to become SILs for a variety of reasons, including the payment they receive. SILs and supervisors described the friendships, personal satisfaction, freedom and creativity that the SIL role can provide. Practical benefits included the opportunity to revisit important content and ‘resume building’. The main reason SILs end their involvement with SI was described as a loss of eligibility through graduating and leaving the institution. Other reasons for leaving were time pressures or the realisation that the SIL is not personally suited to the role.

The ideal person to support SILs was described as being knowledgeable about SI and experienced as a SIL. Personal qualities of empathy, approachability and flexibility were also mentioned. Skill with giving feedback was also mentioned by some interviewees. There was no agreement on the importance of the support person understanding disciplinary content. Although SILs and supervisors described a variety of relationship structures, all featured regular contact with a
critical friend. When asked how long they would commit to this relationship, the median was half-an-hour per week.

SILs and supervisors mentioned a variety of benefits necessary for an online support relationship to be worthwhile. These included improvement in sessions, a meaningful relationship and recognition for the mentor. A lack of time was identified as a potential barrier to an online relationship. Cost and technology-related problems were anticipated, and online relationships were described as less preferable than face-to-face relationships. SILs and supervisors reported that they have access to computers and the Internet through on-campus facilities. All SILs reported using their university’s LMS and some mentioned that they used multimedia or online communities recreationally.

**Interviews with practitioners experienced with online mentoring of professionals and teaching staff**

The three online mentoring practitioners interviewed had a range of experiences with online mentoring. One had experience with online mentoring to support early career teachers through a professional association; another had experience supporting commencing teachers with online mentoring as an academic involved with teacher training. The third interviewee was involved with online mentoring of professionals, predominantly engineers. All three interviewees had been involved with online mentoring as a practical activity and as a research endeavour. Their responses are reported based on the themes that they discussed in response to the interview schedules in Appendix 1. To provide an understanding of the context of each practitioner, analysis is reported here on a per-interviewee basis.

**Interviewee 1**

The first interviewee was involved with an online mentoring program for secondary school Physical Education (P.E.) teachers and this program was in its third year of operation. The P.E. teacher-mentoring program has two phases; the first is a conference in which beginning teachers elect to participate in an online mentoring, and training. Those who elect to participate are paired up with
selected experienced teacher-volunteer mentors, and during the first phase the mentor-mentee pairs learn the technology and develop a rapport in a face-to-face setting. They also commit to engaging in online mentoring on a weekly basis for the second phase, which takes place in the second school term of the mentee’s first year of teaching. Online mentoring relationships are allowed to continue for the third school term, with mentors and mentees allowed to negotiate their own expectations of each other. The interviewee’s involvement with this project was in its design and organisation but not in the technology. A project officer is employed one day per week to stimulate the discussion and monitor it.

After an initial trial using one mentor to two mentees, the project changed to one mentor to one mentee. The primary reason for this was that two mentees was too much work for the mentors, who were all full-time teachers. Another secondary reason was that the mentors said they gain a great deal from the mentoring relationship themselves. The online mentoring program focused on “what beginning teachers need to think about”, and the NSW Institute of Teachers helped to provide topics to discuss.

In addition to the training day at the start of the semester that mentors and mentees attend, the time commitment expected of online mentors and mentees is about one hour per week. Actual time commitment varies from this, and the relationship usually tapers off due to teachers’ heavy workload at the end of term. The interviewee made the point that “no contact does not mean that it is not working” and that some see the online support as a “safety net”. The project finishes at the end of the third school term, but the online tool stays open.

**Interviewee 2**

The second interviewee described an online mentoring program for beginning teachers that contains two components: resources and community. The resources component contains useful information about preparing lessons, classroom management and other topics of interest to beginning teachers. Resources are not created by the users and are mostly syndicated feeds from
other sites. The community component is for connecting beginning teachers with their peers and voluntary mentors who are experienced teachers who have won teaching awards.

In the mentoring program described by the second interviewee the mentors are not given training, as their status as exemplary teachers is perceived as qualifying them sufficiently for the role. As mentors are volunteers, one challenge that has been faced is encountered when the mentee needs help within a short timeframe that may not be feasible for the mentor. Another problem that has been posed is that teachers at the time typically had “patchy” access to email.

**Interviewee three**

The third interviewee’s experience with online mentoring is with a professional organisation, with mentors and mentees who were “professionals operating as independent contractors and consultants – predominantly engineers but also IT professionals, pharmacists and scientists”. This mentoring program intended to facilitate the development of business skills in mentees in the “startup phase” or first three years of consulting. Mentors were qualified and experienced self-employed professionals.

Before participating in online mentoring as a mentee or mentor, participants were required to complete a general online mentoring module and a module aimed at either mentors or mentees. The training was aimed at “clarifying the expectations of participants, exploring learning styles, outlining tips and common pitfalls, and taking participants through the basic steps of building rapport, agreeing learning outcomes, agreeing topics, discussing topics and agreeing actions and new topics”. Participants also received the module in print form as part of a participant manual.

The mentoring relationship was facilitated by email, which was appropriate for some users but not for others. Mentor-mentee pairs were supported by fortnightly facilitation messages. Time commitment was at the discretion of the mentoring pairs, but generally was between one and two hours per week.
Factors identified by experienced practitioners as contributing to the success of online mentoring

Interviewees were asked to identify what they thought were the main factors that contribute to the success of online programs to support teaching staff or professionals, as well as the steps that have been taken to increase quality and quantity of mentoring contacts. Analysis of their responses to these questions is grouped by theme to highlight any common ideas or disagreement.

Interviewees 1 and 2 both mentioned a project officer as critical to the success of online mentoring. The roles of this person include facilitating discussion, prompting mentoring pairs to initiate and maintain contact, and providing referrals to other supports. Both interviewees who mentioned a project officer said that the quality and suitability of this person to the role was critical to the success of online mentoring. Interviewee 2 said that it can be difficult to source funding for a project officer position.

All three interviewees mentioned the quality of mentoring relationships as a factor that contributes to the success of online mentoring. Interviewee 1 described an “online mentoring agreement” which is written collaboratively by mentor and mentee at the start of their relationship. This acts as a mechanism to get mentors and mentees to indicate what they want out of the relationship. Although it is not enforced by the project officer, it is kept for reference so that mentors and mentees can refer back to it. Interviewee 1 found these agreements to be important to the quality of relationships. Although most mentoring dyads produce similar agreements, he said that requiring each to produce their own agreement allows for customisation. Interviewee 2 mentioned trust, privacy and confidentiality as necessary for successful mentoring relationships, and described technical and policy measures used to achieve this. He emphasised the need for a “closed site” that was only accessible by mentoring participants. For Interviewee 3, successful online mentoring relationships are characterised by long-term, diverse, customised support and
professional learning. She also said that the success of mentoring relationships was dependent on the quality of the mentoring matches.

All practitioners spoke positively about their mentors. Interviewee 1 said that they were motivated, professional, and believed in online mentoring. Although the mentors of Interviewee 1 did not desire payment or any other external reward, they did sometimes find fitting mentoring into their workload difficult.

Interviewee 2 said that mentors and mentees need to be enthusiastic for online mentoring to succeed, and described approaches used to get them engaged. Participants were sent email prompts to encourage them to log in to the online mentoring system. Once they were logged in, case studies, stories and other structured activities were provided in an attempt to engage them. Interviewee 3 described similar approaches including a manual, web-based exercises and a journal.

One other contributor to success that was mentioned by the first interviewee was face-to-face contact between mentor and mentee at a training day. He said that invariably the pairs that aren’t able to meet at the face-to-face training are the pairs that do not work as well. This interviewee also mentioned having photos of all the mentors and mentees available online to help them appear “human”.

**Experienced practitioner advice on technology choice for online mentoring**

Interviewees were asked to discuss the sorts of technologies that would be appropriate for specific components of an online mentoring relationship for SILs: modelling of teaching skills, assessment of teaching skills, provision of psychosocial support, and career or informational support. Analysis focuses on the first two interviewees, as the third interviewee’s experiences lay with email mentoring of non-teaching staff.

All interviewees mentioned the technology used in their online mentoring program as contributing to its success. Interviewee 1 said that functional,
reliable technology is necessary. Expanding on this, he said that technical support is necessary, and that when the system is down participants will substitute it with email or telephone contact. He said any system problems that discourage participants detract from a sense of community. The second participant said that email notifications were important for the success of his mentoring scheme. When one member of a mentoring dyad makes a post, the other member is immediately notified by email. He said that this promotes more timely responses, which can increase the perceived quality of the relationship.

The first interviewee said that while remote modelling of teaching skills was not used within their project, skills and approaches were discussed, and mentors and mentees were encouraged to reflect on their own teaching. Pairs would discuss possible strategies, try them out in the classroom and discuss how they went. Mentors were encouraged to motivate their mentees to think rather than just give advice, and this is reflected in how teaching skills are discussed. The second interviewee described an approach of “this is how an expert does it and it is how you should do it” and said it was an outdated concept. He described another approach that focuses on “sharing stories”, in which leaders themselves ask each other how they approach a skill and share resources such as a reflective blog entry, a video from their mobile phone, or an artefact on TeacherTube.

The first and second interviewees described technical features to upload resources. The majority of these resources were documents for use in the classroom.

The second interviewee said that career, informational and psychosocial support was provided through online mentoring. This interviewee said that initially he had a set view of what would happen in online mentoring but that what happens is actually much broader. He said that online mentoring is about providing a resource and facilitating a process rather than having a restricted view of what should happen.
When discussing remote provision of psychosocial support, the second interviewee said that for beginning teachers, issues such as classroom management, assessment and dealing with parents were examples of focus topics. He suggested that within an SI context, the content being discussed in SILs’ sessions could be used as a framework, or stories from their sessions. This interviewee emphasised asking the community what it wants to have and providing it.

**Summary of analysis of experienced practitioner interviews**

Three practitioners who were experienced with formal online mentoring programs for teachers and other professionals were interviewed. Two practitioners used web-based tools for mentoring, with the other using email. Online mentoring project officers were praised for their high quality and suitability to the role, although one practitioner found funding such a position difficult. Practitioners said that relationships were the key to successful online mentoring. Measures were incorporated into mentoring programs to improve relationship quality, including careful matching and an online mentoring agreement. Technology was described, and reliability and support were highly valued.

**Summary**

This chapter addressed Research Question 1, “*What is an appropriate model for the mentoring of geographically-dispersed Supplemental Instruction leaders?*” through an exploratory qualitative study. Design variables that represent an abstract way of designing or communicating a mentoring model were identified from the literature. Data relating to these variables were gathered and analysed from SILs, SI supervisors and online mentoring practitioners. In Chapter 4 these data form the basis of an online mentoring model for geographically-dispersed SILs.