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THE UNIVERSITY OF BRITISH COLUMBIA
Faculty of Pharmaceutical Sciences



UNIVERSITY OF ALBERTA
FACULTY OF PHARMACY AND
PHARMACEUTICAL SCIENCES



Peer Assisted Learning in

Pharmacy Experiential Education

A Guidebook for Preceptors

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INTRODUCTION TO THIS GUIDEBOOK SERIES

As a profession, pharmacy has largely adhered to the traditional 1:1 learner to preceptor model. Recently in pharmacy experiential education in Canada, there has been increasing interest in the use of non-traditional learner-preceptor models. This interest is driven by various factors, including increased placement capacity demands resulting from entry level doctor of pharmacy programs, progression of practice to advance the opportunities for learners, preceptor interest to try “new ways” to augment the learner experience, and an increasing awareness of the benefits associated with using these models. As programs and preceptors across the country begin to adopt these non-traditional models, it is important to provide preceptors and experiential education coordinators with guidance to support best practices.

These guidebooks represent an effort to compile the available knowledge, both theoretical and practical pertaining to the following three models:

- Peer assisted learning (PAL)
- Near peer (NP) model
- Co-precepting model

APPROACH TO GUIDEBOOK DEVELOPMENT

Existing literature pertaining to non-traditional learner-preceptor models in health discipline experiential education was systematically reviewed by Loewen et al at the University of British Columbia (1). The main benefits and challenges described in the literature were summarized and included for each of the learner-preceptor models in each respective guidebook. These findings were supplemented by extracting themes/advice from guiding documents developed by a variety of health disciplines from the University of Alberta (2), the University of Manitoba (3), and the University of Toronto (4). As well, these guidebooks leverage work already done by the Faculty of Pharmaceutical Sciences, University of British Columbia and the Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta.

In addition, perspectives and advice from current preceptors who routinely employ these models were solicited through a combination of one-on-one interviews and electronic surveys. Seventeen BC preceptors and nine BC learners who had recently participated in the PAL model were interviewed in 2014. Also, in the summer of 2015, preceptors from across Canada who had experience with the PAL model were contacted to participate in either a survey, and/or telephone interview. Interview participants included: Alberta preceptors (N=6), and Ontario preceptors (N=1). Participants in the electronic survey included: BC preceptors (N=9), Alberta preceptors (N=4), Ontario preceptors (N=6) and Newfoundland preceptors (N=1). The responses provided by these preceptors were then qualitatively analyzed and the key concepts and themes were summarized. Questions were asked in such a way to elicit practical tips and strategies to optimize the experience. The valuable input and perspective from each of these preceptors, along with expertise from experiential faculty, made this guidebook series possible.

EXPERIENTIAL EDUCATION TERMINOLOGY

Traditional 1:1 Model

A learner-preceptor model employed during placements where one preceptor at a time is responsible for supervising and assessing one learner.

Co-precepting Model

A learner-preceptor model where more than one preceptor supervises one or more learners. This can occur either simultaneously or in a sequential fashion across a placement.

Entry-to-Practice Program

The first degree program in pharmacy, either an entry-to-practice Doctor of Pharmacy or a Bachelor degree.

Experiential Office

The Experiential Office is a generic term for the office within the faculty/school that coordinates experiential education. They are generally responsible for the administration of learner experiential placements. This involves development of the curriculum for each course, site/preceptor recruitment and retention, learner orientation and support, scheduling of learner placements and preceptor development.

Learners

Synonym: students. May refer to any level of learner: entry-to-practice student, pharmacy practice resident, post-graduate Doctor of Pharmacy student or other advanced learner including those completing a specialized residency or fellowship program.

Near Peer Model (NP)

Synonyms: near peer learning, near peer teaching, pyramidal learning, tiered learning. A learner-preceptor model where the preceptor(s) supervise two or more learners who are at different levels. The senior learner provides learning support to the junior learner(s), e.g. two second year and one fourth year student, or one pharmacy practice resident and one post-graduate Pharm D learner.

Peer Assisted Learning (PAL) Model

Synonyms: paired, 2:1 or 3:1 models. Learner-preceptor model where the preceptor(s) supervises two or more pharmacy learners who are at the same level. It is expected that the learners help each other learn and learn by teaching, e.g. Two entry-to-practice learners or two pharmacy practice residents. In many places this document may refer to “two learners” because this is the most common PAL configuration used in pharmacy. However, the principles of PAL also apply to any configuration of two or more learners either assigned to one preceptor or to a co-precepting team.

Pharmacy Practice Residents (or Pharmacy Residents)

Graduate pharmacists who are enrolled in a pharmacy practice residency program. Usually these programs are administered by a hospital, health authority or health region.

Placement

Synonyms: practicum, rotation or experiential placement. Experiential education in a variety of pharmacy practice settings where learners are supervised by practicing pharmacists to gain practical experience and bridge knowledge between the classroom and the pharmacy practice environment.

Preceptors

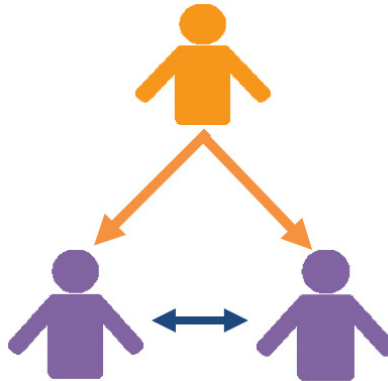
Synonym: practice educators. Practicing pharmacists who dedicate their time to mentor, supervise and assess learners during their placements.

- i. **Primary** Preceptors - those who supervise and are responsible for completing the assessments of learners.
- ii. **Co-Preceptors** - those who share responsibility with the primary preceptor to supervise and contribute to the assessment of learners.
- iii. **Secondary** Preceptors - those who supervise learners for 1-2 days and usually have no direct role in completing written assessments. Feedback on learner performance is given to the primary preceptor and to the learner.
- iv. **Champion** Preceptors - those experienced with non-traditional precepting models who were interviewed and surveyed in the process of developing these guidebooks.

A. PEER ASSISTED LEARNING (PAL)

I. WHAT IS IT?

The PAL model, commonly employed by a number of health disciplines during experiential education, is defined as having two or more learners at the same educational level placed in the same clinical area and precepted by one preceptor or a precepting team (i.e. 2:1 or 3:2, representing the learner: preceptor ratio). The paired model, or 2:1 model, is a typical example of PAL.



This model allows learners at the same educational level to help each other learn and in turn, learn themselves by teaching, as part of their educational experience. It also allows learners to collaborate and support one another throughout the placement (1,2). In the PAL model, learners can explain difficult concepts to one another, collaborate on projects or assignments, observe each other's clinical skills, provide peer feedback, brainstorm therapeutic options and share rationales (2). Learners enhance their critical reasoning and self-directed learning skills by working both independently and together to solve problems before approaching the preceptor. They can work as a team but are individually held accountable (4). For all these reasons, this model allows for learners to function more independently than in the 1:1 model which can be time saving for the preceptor. It also allows preceptors to spend greater amounts of quality time with the learners to problem solve complex issues rather than answering simpler questions.

The concept of precepting more than one learner at one time may be new to some preceptors. However, as this guidebook will outline, the PAL model has some significant potential advantages compared to the 1:1 model and preceptors who have tried it very often prefer it. We hope this guidebook will support the experience for both preceptors and learners adopting the PAL model.

"I would never go back to the 1:1 if I had the choice."

- Preceptor

II. WHAT DOES THE LITERATURE SAY?

A systematic review conducted by Loewen et al. (1) outlined the advantages and disadvantages of different experiential models employed by health disciplines from the perspective of learners, preceptors and the placing or receiving institution. Twenty-eight articles assessing the 2:1 PAL model and 8 articles assessing the 3:1 PAL model were found in the literature. A summary of the findings are reported below.

It is acknowledged in the literature that no one model has been proven to be superior to the others (5); however, each has pros and cons and may work well for preceptors at various sites.

Most commonly cited **advantages:**

- Shared knowledge between learners
- Increased social support from peer(s) and decreased anxiety
- Increased sense of teamwork
- Increased independence from the preceptor
- Less stress and workload for preceptor
- More opportunities for discussions and feedback compared to 1:1 model

Most commonly cited **challenges:**

- There may be competition between learners
- Learners may feel that they lacked one-on-one time with preceptor
- May increase preceptor workload and paperwork
- Physical space limitations compared to 1:1 model (workspace and computer access*)

*particularly when 3 or more learners are involved

Loewen et al. Medical Education 2017. (1)

III. WHAT DO CANADIAN PRECEPTORS AND LEARNERS SAY?

The following tables outline key benefits of PAL as described by the preceptors and learners who participated in the interviews and national survey.

a) Benefits for the Preceptors

| Advantage | Specifics |
|--|---|
| Learners are more independent together than alone. | <ul style="list-style-type: none"> ✓ Learners can ask each other questions and problem solve together before approaching the preceptor. This reduces the time that the preceptor may otherwise spend assisting learners with simple issues. ✓ When learners consult each other first, ideas are better thought out when presented to the preceptor. |
| More efficient way of precepting. | <ul style="list-style-type: none"> ✓ Precepting two learners per placement block instead of two learners over two different placement blocks is more time efficient. ✓ Allows the site to fulfill precepting requirements and build capacity while having some months that are learner-free for preceptors (if desired). |

| Advantage | Specifics |
|--|---|
| Enhancement of teaching/precepting skills. | ✓ Having more than one learner allows preceptors to develop additional skills that help foster peer assisted learning and collaborative team work. |
| Increased ability to provide more patient care activities. | ✓ Having more than one learner may facilitate increased patient care because workload is divided among more people, each with different perspectives and insight. |

"We would be able to answer a lot of each other's questions, so we didn't have to always go to the preceptor for every single question that we had."

- Learner

"It would give the preceptor a little more free time because they're not constantly one-on-one with the learners."

- Preceptor

"It is an efficient way for the preceptor to meet learner load demands and still permit the preceptor to engage in their project work."

- Preceptor

"I just love it. There are so many advantages - it is great for the site; we have had so much positive feedback from the unit and the staff we work with. We are not new at doing this, and shouldn't be afraid - we have learned from our medical colleagues and nursing colleagues. And ya, you have to sort of jump in, it's really fun."

- Preceptor

"On the ward, there was a strong pharmacy presence that was noted by other health care professionals."

- Preceptor

b) Benefits for the Learners

| Advantage | Specifics |
|--|---|
| Peer Support | <ul style="list-style-type: none"> ✓ Learners often feel more comfortable asking each other questions first before approaching the preceptor. ✓ Learners provide each other with reassurance, praise, approval, encouragement and constructive feedback. ✓ Learners can bounce ideas off one another. ✓ Learners can help keep one another on track. ✓ Makes the practice environment less intimidating. ✓ Learners can share housing and transportation if the placement is outside of their home community. |
| Shared knowledge | <ul style="list-style-type: none"> ✓ Learners can discuss cases, share stories, explain concepts, collaborate on research, observe and learn from one another, brainstorm and share rationales. ✓ Learners also learn by teaching one another (active learning strategy - a necessary skill for continuous professional development). |
| Opportunity for richer discussions | <ul style="list-style-type: none"> ✓ The more people, the greater the variety of ideas, perspectives and knowledge that can be shared. |
| Learn to work collaboratively | <ul style="list-style-type: none"> ✓ The learners will develop interpersonal, communication, collaborative problem solving, and clinical observation skills as well as learn how to provide and receive constructive feedback. ✓ This reflects the reality of team-based practice in their careers. |
| Some of the workload can be divided among the learners | <ul style="list-style-type: none"> ✓ Research, project work, and patient load can be divided up. ✓ This collaboration may yield more thorough and well thought out work. |

"I think that was actually a bonus when I found out I was with somebody else from my year, I was pretty excited just because it's not as scary."

- Learner

"I feel like if I was alone, I may be stuck more often or I may feel like I don't have a resource to go to."

- Learner

"It gives you a little more confidence knowing that your level of experience, skill is the same as somebody else."

- Learner

"You have a safe environment with your partner to run ideas by them before you run them by a preceptor."

- Learner

B. STRATEGIES FOR SUCCESS

I. PLANNING THE PLACEMENT

In addition to the usual strategies to prepare for a traditional 1:1 placement, preceptors familiar with the PAL model suggest the following:

Preceptor Tips for a Successful Placement

- ▶ Create a template schedule or calendar that includes all debriefs and assessments and update it as needed during the placement. It should outline what each of the learners will be doing, with whom and when. Learners appreciate knowing what to expect from their placement.
- ▶ When planning ahead in regard to physical space issues consider not only workspace for the learners, but also places to meet, have discussions, and do presentations.
- ▶ Be organized and cognizant of time during the placement. It's easy to fall behind schedule. This is especially important with multiple learners. Have checklists for things that need to be done by certain times during the placement.
- ▶ Schedule a debrief at least once daily, preferably at the same time(s), to discuss cases and how things are going for the learners. Some preceptors and learners like to do this before rounding with the team so that patient updates and recommendations can be discussed prior to meeting with the rest of the team.
- ▶ Conduct the majority of activities and discussions as a group. This will save time and encourage the learners to learn from and teach one another.
- ▶ Assessments must be scheduled individually.

Experiential Faculty Advice

- ✓ Review the course syllabus to determine which course activities learners can do together and which must be done independently.
- ✓ Consider scheduling 1:1 debriefs with each learner as needed. Some learners may not be comfortable sharing issues/challenges in a group setting with their peers.

II. SETTING EXPECTATIONS OF THE LEARNERS

Preceptors should communicate the expectations of this model to the learners in advance of the placement and review these again during orientation. Learners should come into the placement knowing that in the PAL Model, they will be working as a team and that they are expected to:

- Ask each other for help before going to the preceptor.
- Review each other's work and provide feedback to one another.
- Demonstrate professionalism when working together (i.e. avoid comparing or competing with each other).

- Participate in joint discussions and activities along with the other learner(s).
- Formulate their own care plans and other assignments, but share findings and provide feedback.
- Always provide peer feedback in a respectful manner.

Tip: Learners can provide effective feedback to each other by providing at least one example of what was done well and one example of what can be improved.

These expectations are in addition to the professionalism and course-related expectations for each learner.

Experiential Faculty Tips on How to Ensure that Expectations are Met

- ✓ Review the course objectives, learners' objectives, schedule, and assessment criteria with the learners on day one. It is also important to outline the expectations of the individual learner, when they are expected to work independently and/or together, how to provide feedback, and expectations of peer assisted learning.
- ✓ Have learners sign off on an orientation task list or learning contract that outlines these expectations. By doing this, learners will know from day one exactly what they need to do to be successful.

III. SUGGESTED JOINT ACTIVITIES TO BE COMPLETED BY LEARNERS

Most direct and non-direct patient care activities can be done as a group (2). However, personal learning objectives should be discussed one-on-one with the preceptor.

Topics for joint discussions with learners:

- Orientation and scheduling
- Expectations around peer assisted learning and how to provide feedback
- Review of safety policies, ethical judgment, and activities outlined in course syllabus
- Therapeutic discussions
- Daily debriefing of activities and experiences to facilitate learning

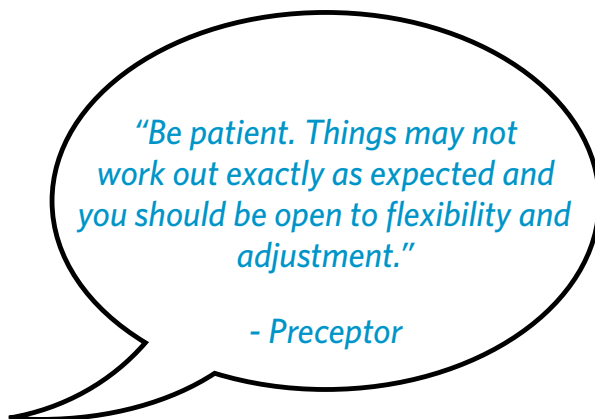
Ideas for collaborative learning activities:

- Provision of direct patient care presents many opportunities for collaborative work. Learners are expected to provide patient care to their own patients. However, they may observe each other, debrief, provide feedback and learn together. Some activities that can be done jointly include:
 - Allergy assessments
 - Medication reconciliation
 - Discharge or targeted drug counselling
 - Attending rounds together
 - Reviewing each other's chart documentation
 - Role playing anticipated patient encounters together ahead of time
 - Patient interviews: learners can take turns as the lead during interviews and give each other feedback
 - Patient reports to their preceptor(s).
 - Collaborating with other healthcare professionals and debriefing with preceptor.

- ❑ Patient Case Presentations: learners prepare independently and peer(s) provide feedback during practice presentation(s).
- ❑ Drug information questions: learners can collaborate to prepare responses or work individually and share findings with each other before submitting the response to the preceptor or requestor.
- ❑ Participate together in other activities organized by the preceptor.

IV. OPTIMIZING THE PAL EXPERIENCE

The champion preceptors were asked specifically about which strategies they employed to overcome the challenges commonly described in the literature or anecdotally associated with PAL.



Surveyed preceptors identified the following as the top three most frequently encountered challenges and offered solutions to address them.

Limited resources, computers, or space

- When possible, plan ahead to make sure there is workspace and laptops/computers set aside for the learners.
- Borrow or beg if necessary! Share computers on the unit or in the pharmacy, use alternate computers elsewhere (e.g. library, vacant offices), and if possible have extra laptops available. Work with what you have.
- Ask learners to bring in their own laptops/devices and use wireless internet, if available/permitted.
- Utilize computer time judiciously (only to gather necessary patient information to provide care); encourage learners to spend most of their time in the patient care area and gather information directly from patients and other team members. It is important to provide clear guidance about how much time the learners are allowed to spend away from the patient care setting.
- If necessary, print information/documents so that learners can work without a computer.
- Inform learners of space that is designated for other workers and is not intended for their use.
- Stagger times when learners use the shared workspace, take breaks, and do independent activities. Have learners coordinate amongst themselves who is going to use the space and when.
- If it is crowded on patient care rounds, the main learner on the case should go into the patient’s room; the other learner should still participate in any discussions that occur afterwards.

Providing learners with feedback and completing assessments may be time consuming

- Provide frequent informal feedback. Do so after every patient care activity, team member encounter and on every patient work-up, documentation activity or drug information request.
- Start the assessment process as early as possible and in ‘real-time’. Document examples of learner performance (behaviours, accomplishments, things to work on) continuously like an evaluation diary. Use this information to facilitate the completion of the written or online assessments.

- Schedule a set time during the day to provide feedback.
- Complete the assessment during the slowest times of your typical work week.
- Split the final assessment of learners over more than one day (e.g. last two days of the placement - one learner each day) to avoid spending an excessive amount of time on assessments on the last day of the placement.

Differences in learning styles or personalities

- Exposure to different learning styles/personalities can actually be a positive experience for the preceptor and learner(s).
- Set ground rules and expectations on the first day regarding mutual respect, how to address conflict and work as a team despite differences.
- Encourage learners to be open to new approaches and to embrace new experiences.
- Be flexible and engage in a variety of approaches to meet the learner's needs.
- Take turns having learners answer questions or present; ensure that quiet or shy individuals are given the chance to engage first in activities.
- Address any issues that arise right away; this will help minimize any conflicts or problems later.
- During conflicts, address the person(s) with the issues individually. Provide feedback, outline the specifics of what has been observed, ask for his/her opinion and have an open dialogue about strategies to improve the situation that align with the expectations within the PAL model. Schedule regular meetings to keep tabs on the situation. Try to use these situations to facilitate discussions about effective teamwork and associated skills.
- Certain activities can still be done together but the option can be given to do some things apart.

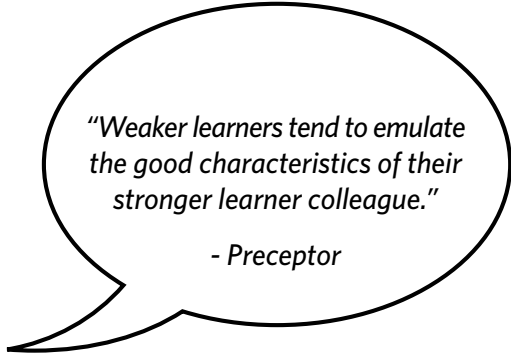
The following were indicated to be potential challenges by half to one-third of preceptors who took the survey.

Time and workload management

- Before the placement, inform supervisors and colleagues that you may not be able to take on extra work/projects during this time and that you may need some support.
- Schedule 'project time' prior to and after the placement.
- Do all activities other than formal assessments together as a group.
- Involving the learners in your regular clinical work will free up time.
- At the beginning of the placement, invest extra time into demonstrating/modeling and observing activities, and providing feedback. This will allow the learners to become independent more quickly and increase their ability to contribute to clinical work in the latter half of the placement. In the second half of the placement, have the learners take on as much of the patient care as they are able.
- Alternate which learner does a full presentation during patient report; have the other learner give a brief synopsis of key issues. Switch for the next day/meeting.
- Leverage your relationships with colleagues including other health professionals. Ask them to provide introductory sessions on their practice or area of expertise and refer the learners to them on matters within their domain.
- Schedule similar activities at the same time each day to minimize mental transitions.
- Ask the learners to teach a subject, present a topic to each other or debate a therapeutic controversy as a learning opportunity. While these are being prepared, the preceptor can focus on non-teaching activities.

Struggling learner

- Have a private conversation with the learner and listen to what he/she has to say. Identify the specific challenges that the learner is experiencing.
- Assign different complexities of tasks to each learner when necessary. The struggling learner may need to provide care to fewer or less complicated patients i.e. tailor objectives to their abilities.
- Encourage the learners to support one another. When possible, continue to have the learners present their patients to the preceptor together. This allows the struggling learner to observe and learn from his/her peers.
- Ensure that the struggling learner is not impeding the growth of the other learner(s) by discussing the progress of each learner separately.



"Weaker learners tend to emulate the good characteristics of their stronger learner colleague."

- Preceptor

- If necessary, support the struggling learner with individualized one on one coaching or modeling on the patient care process. Once the process is solidified, the learner can present with the group again. The group can provide him/her with further tips and advice.
- You may need to involve another colleague and/or contact the faculty for support.

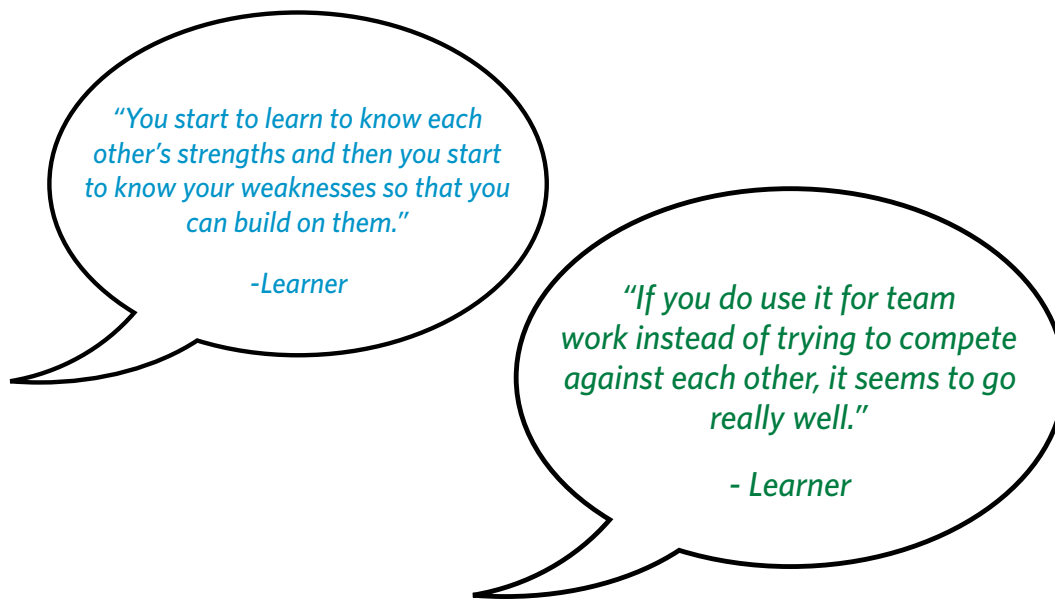
Experiential Faculty Advice

- ✓ Contact the faculty and/or on-site coordinators early for support and guidance pertaining to struggling learners.
- ✓ Develop a strategy that addresses the factors involved. Have the learner identify and document personal learning objectives, an action plan and a timeline for achieving the outcomes in question. Develop this plan early and review it at scheduled times to track progress. If the learner is still struggling, continue to involve the faculty in the discussion to support both you and the learner.

Although the following three challenges are reported in the literature and by other health disciplines, they were not deemed to be problematic issues by most of the pharmacy preceptors surveyed.

Minimizing competition among learners

- Set ground rules early on that emphasize collaboration rather than competition. Discuss expectations regarding joint projects. See Section B. II Setting Expectations of the Learners
- By having the learners present their work in front of each other, one learner's excellence may motivate the other. In other words, healthy competition can actually be a good thing rather than a problem.
- Consider whether the behaviour is truly competitive or whether the learner(s) may be trying to compensate because of a perceived imbalance in or lack of one on one attention.
- Aim for similar one on one time with each learner and provide consistent opportunities for individual questions, discussion and feedback so that the learners perceive that they are being supported equally.
- Sometimes it may be a lack of self-confidence or insecurity on the part of one learner. Again setting expectations ahead of time is critical to help avoid comparison.
- When different opinions are expressed, it is important to have an open conversation together as a group about the pros and cons of each perspective. This can serve as an excellent learning opportunity since it encourages each learner to defend their recommendation or idea.
- Keep each learner's performance assessments confidential.
- If competition begins to interfere with either learner's performance or the placement itself, contact the faculty for support.



Shortage of patients - maintaining learning opportunities

- If necessary, learners can provide care to the same patient by interviewing the patient together but each learner can lead different parts of the interview. They can then work on care plans independently and justify their own recommendations. Try to use more complex/challenging patients in these cases. Alternatively, if there is more than one disease state for a particular patient, learners can work up different issues for the same patient and come together to discuss how their plans impact each other.
- Learners can provide care to all the patients in your clinical practice regardless of complexity.
- Split the clinical area/unit equally and assign each learner to a group of patients.
- Assign patients from a clinical practice area/unit other than your own. This may create logistical challenges around making recommendations to an unfamiliar team but it also represents a new learning opportunity.
- Develop a list of alternative activities (such as projects) prior to the placement that can be assigned during slow times.
- Provide case-studies based on previous challenging patients you've encountered and have the learners complete work-ups and plans.

Comparing learners

- As the preceptor, it is your responsibility to get to know and assess each learner based on his/her individual performance.
- It may be helpful to document your feedback and observations in a journal or log book to keep your impressions of each learner separate.

Experiential Faculty Advice

- ✓ Focus on defined competency expectations of the placement assessment to measure performance of each learner.
- ✓ Contact the Faculty or on-site coordinators for support and guidance.

C. MYTH VS. TRUTH

Myth #1: Precepting more than one learner simultaneously will significantly increase my workload.

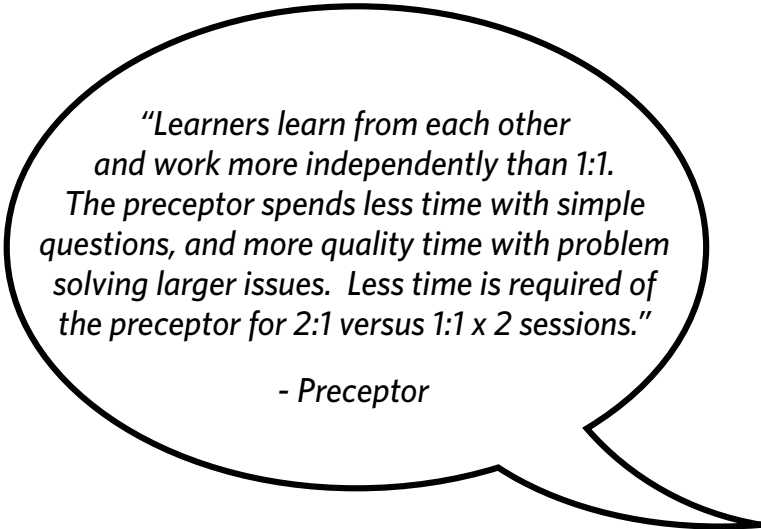
Truth:

- ▶ Many preceptors report that precepting more than one learner results in only a small increase in teaching workload. They indicate that the workload is similar to what it is with one learner because nearly all activities, excluding performance assessments, can be done together and because learners are more independent in the PAL model. (See: Benefits for the Preceptors).
- ▶ Compared to the traditional 1:1 model, additional preceptor time early in the placement may be required to set expectations and establish workflow; however, in the latter half of the placement, increased learner independence often results in a decrease in preceptor workload.
- ▶ Patient care activities and discussions can be more time intensive with multiple learners. Have learners alternate doing full/detailed patient reports each day. Ask the other learner to give a very brief synopsis of their patient(s) focussing on any high priority issues or questions they have.
- ▶ Performance assessments can be time-consuming because they must be done separately for each learner but strategies exist to mitigate this. (See: Section B. IV. Optimizing the PAL Experience - "Additional time may be required to do feedback and assessments" and "Time and workload management")

Myth #2: PAL learners are not truly more independent than a single learner in the 1:1 model.

Truth:

- ▶ Investing more time with the learners at the beginning of placement to ensure that they are doing things correctly and learning the patient care process is essential. This way the learners will become independent more quickly and you will feel more comfortable allowing them to work on their own.



"Learners learn from each other and work more independently than 1:1. The preceptor spends less time with simple questions, and more quality time with problem solving larger issues. Less time is required of the preceptor for 2:1 versus 1:1 x 2 sessions."

- Preceptor

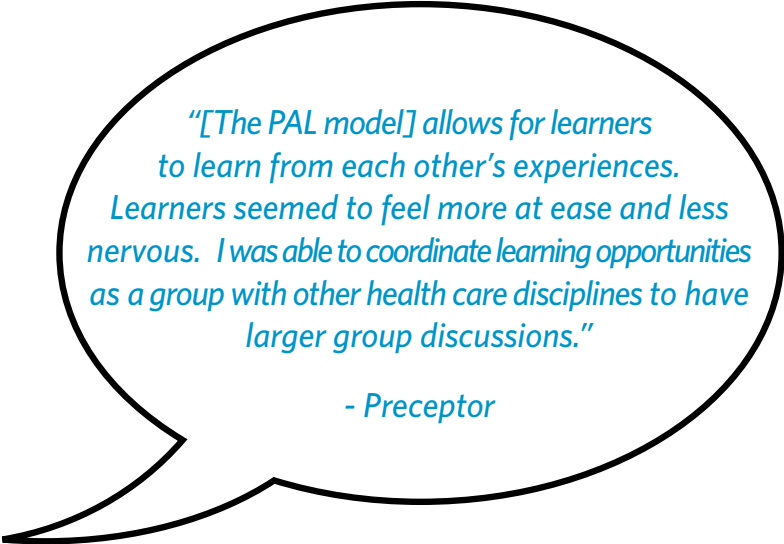
Myth #3: Learning is compromised with PAL because there is less one on one time with the preceptor.

Truth:

- ▶ Although there may be less one on one time with the preceptor there are multiple benefits to working with another

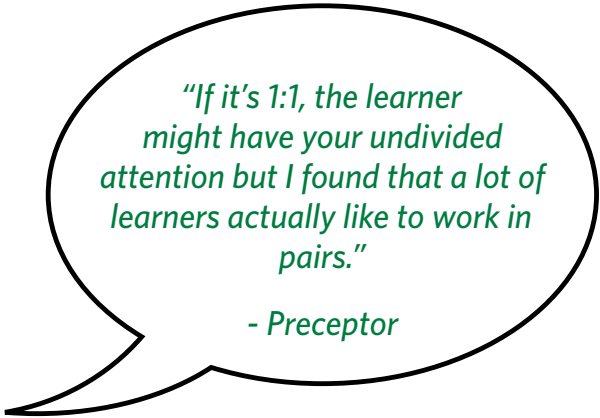
learner. (See: Section A. III. Benefits for the Learners)

- ▶ Learners can learn from one another by sharing experiences and knowledge.
- ▶ Learners usually prefer PAL placements because they have the opportunity to work with a peer.
- ▶ Richer discussions occur when multiple learners are present.
- ▶ Learners can problem-solve simple issues together. This way, the time spent with the preceptor will be the most beneficial use of time possible.



"[The PAL model] allows for learners to learn from each other's experiences. Learners seemed to feel more at ease and less nervous. I was able to coordinate learning opportunities as a group with other health care disciplines to have larger group discussions."

- Preceptor




"If it's 1:1, the learner might have your undivided attention but I found that a lot of learners actually like to work in pairs."

- Preceptor

Myth #4: The PAL model requires extra preceptor training.

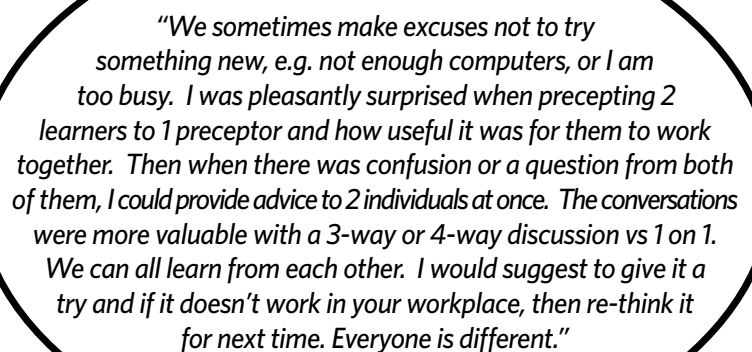
Truth:

- ▶ Most preceptors who currently use the PAL model did not receive formal training relating to the model and learned through experience.
- ▶ Preceptors report that having more than one learner is not all that different than having one since the majority of activities can be done as a group.
- ▶ Seek advice and support from a preceptor who has used the PAL model or if possible, co-precept with an experienced preceptor during your first PAL experience.



"We are a new facility and we thought we'd try this model and see if it works and so far we have had huge success with it. It is lots of work but rewarding; so far we have had very positive experiences."

- Preceptor



"We sometimes make excuses not to try something new, e.g. not enough computers, or I am too busy. I was pleasantly surprised when precepting 2 learners to 1 preceptor and how useful it was for them to work together. Then when there was confusion or a question from both of them, I could provide advice to 2 individuals at once. The conversations were more valuable with a 3-way or 4-way discussion vs 1 on 1. We can all learn from each other. I would suggest to give it a try and if it doesn't work in your workplace, then re-think it for next time. Everyone is different."

- Preceptor

NON-INSTITUTIONAL PRACTICE SETTINGS

The experience and perspectives presented in this guidebook were shared by preceptors mostly from the institutional settings; however, the principles of PAL could be applied broadly in community, primary care or ambulatory practice settings. Preceptors in non-institutional practice settings are encouraged to adapt the strategies provided in this guidebook to their own practice setting.

REFERENCES

1. Loewen PS, Legal M, Gamble A, Shah K, Tkachuk S, Zed PJ. Learner : preceptor ratios for practice-based learning across health disciplines: a systematic review. *Medical Education* 2017 [In Press].
2. Cox C, Bertholet R, Gukert M, MacDonald M. Pharm 316 Peer Assisted Learning (PAL) Placement Tip Sheet. University of Alberta, Faculty of Pharmacy and Pharmaceutical Sciences.
3. Occupational Therapy Outreach Development Team. School of Medical Rehabilitation, University of Manitoba. Models of Fieldwork: 2 Learners: 1 Educator. 2004.
4. Ladyshevsky R, Elizabeth H. Department of Rehabilitation Medicine, Division of Physical Therapy, University of Toronto. The 2:1 Teaching Model in Clinical Education. A manual for clinical instructors. 1990.
5. Lekkas P, Larsen T, Kumar S, Grimmer K, Nyland L, Chipchase L et al. No model of clinical education for physiotherapy students is superior to another: a systematic review. *Aust J Physiother* 2007; 52:19-28.
6. Lindblad A, Howorko J, Cashin R, Ehlers E, Cox C. Development and Evaluation of a Student Pharmacist Clinical Teaching Unit Utilizing Peer Assisted Learning. *The Canadian Journal of Hospital Pharmacy* 2011; 64: 446-450.

APPENDIX I. TIMELINE

Below is a compilation of suggestions from preceptors on what to do before, on the first day, and by the end of the first week of placement. Note that this is surprisingly similar to what you would expect with one learner on site.

Philosophies to embrace throughout the placement:

1. It is important to plan ahead but adjustments will always have to be made as patients are admitted or referred to you
2. Make the learners feel like part of the team
3. Ensure open communication among the group
4. Encourage the learners to engage in PAL by helping each other out, and providing peer feedback
5. Ask colleagues for their opinion if you encounter a challenge with the learners.
6. Be open minded - Part of the solution is tackling the situation with the right mentality. Don't restrict yourself in doing things one particular way.

Before the placement

- Familiarize yourself with the learner's goals, activities, course objectives
- Make contact with learners and provide:
 - general placement information, common resources and pre-readings, as appropriate
 - expectations of the PAL model, what it is, the advantages
 - which learner(s) they will be working with
- Let other site stakeholders know that there will be more than one pharmacy learner on site
- Arrange activities involving other disciplines/pharmacists, if these are deemed beneficial
- Create a calendar outlining your action plan, including:
 - what's happening on each day
 - when assignments should be completed
 - what discussions are going to be had and when
 - group activities, individual assessments and/or anything else that is planned for the placement
 - how many patients each learner is expected to care for each week
- Secure options for a workspace, computer access and resources ahead of time, including IT access
- Prepare for therapeutic discussions
- Adjust your schedule keeping in mind placements are always busier in the first week

First Day

- Do a general site orientation as a group
- Go over a patient workup as a group so learners know how to access information and work up a patient systematically
- Introduce learners to the members of the team
- Review expectations regarding a collaborative work environment, the PAL model, and how to provide feedback to each other
- Review the schedule for the group, expectations for joint activities and time for individual assessments
 - Set a defined time to meet each day as a group and/or individually
- Have a brief individual discussion with each learner to review any areas of concern they may have, identify their learning style and expectations

First Week

- Model your practice, then observe the learners and provide regular feedback daily
- Be cognizant of learner progress in order to identify a struggling learner early and contact Faculty
- Pay attention to group dynamic and any potential personality conflicts - it is better to deal with these early in the placement
- Check in frequently with the learners especially in the beginning

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