

KNOWLEDGE HYDRANT: A PATTERN LANGUAGE FOR STUDY GROUPS

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Version: 0.9, Updated: July 1, 1999

*This is a draft, which is constantly being revised.
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available soon. Please send feedback to
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Introduction

Educating ourselves is a life-long endeavor. To learn and grow, we often attend classes, consult teachers, read articles and books, or seek help from colleagues and friends. Of the many educational tools available to us, one of the greatest is called a study group.

A study group can make a difficult book easier to understand, it can succeed where an unsatisfying class fails, and it can support you if your environment doesn't support your ongoing learning and growth.

A study group is a collection of individuals who meet regularly to improve their understanding of some non-trivial subject, like a body of great literature, by participating in dialogue.

Study groups are conducted all over the world today, but their origins go back to the dialogues of the ancient Greeks. This learning tool has endured because it works so well.

If you analyze successful study groups you can discern their patterns. These patterns energize, inspire and sustain a group over time.

In the landmark books, *A Pattern Language* and *A Timeless Way of Building*, Christopher Alexander and his colleagues introduced the world to the idea of a pattern language. A pattern language is a very practical network of important, related ideas that provide a comprehensive treatment of a subject. But while they are intended to be comprehensive, pattern languages are not written for experts: they convey expert solutions for laypersons, empowering those individuals to generate high-quality works in their own unique way.

This pattern language is intended to help people generate or improve a study group.

Navigating The Language

The authors and architects of the original pattern language understood that individuals vary in how they obtain knowledge. Some don't have a lot of time and want to gain knowledge as fast as possible. Others prefer to extract as much knowledge as they can by pondering a work's every paragraph and page. Still others prefer to study a work's visual elements—its photographs and sketches—before diving into the words.

Good pattern languages make this possible because they can be navigated in numerous ways. The form of the patterns makes this possible. Every pattern follows a consistent form, which the authors of the original pattern language described as follows:

First, there is a picture, which shows an archetypal example of the pattern. Second, after the picture, each pattern has an introductory paragraph, which sets the context for the pattern by explaining how it helps to complete certain larger patterns. Then there are three diamonds to mark the beginning of the problem. After the diamonds there is a headline, in bold type. This headline gives the essence of the problem in one or two sentences. After the headline comes the body of the problem. This is the longest section. It describes the empirical background of the patterns, the evidence for its validity, the range of different ways the pattern can be manifested, and so on. Then again, in bold type, like the headline, is the solution—the heart of the pattern—which describes the field of physical and social relationships which are required to solve the stated problem in the stated context. This solution is always stated in the form of an instruction—so that you know exactly what you need to do, to build the pattern. Then, after the solution, there is a diagram, which shows the solution in the form of a diagram, with labels to indicate its main components.

After the diagram, another three diamonds, to show that the main body of the pattern is finished. And finally, after the diamonds there is a paragraph which ties the pattern to all

those smaller patterns in the language, which are needed to complete this pattern, to embellish it, to fill it out. [Alexander, p. x-xi]

A reader can take in a large amount of knowledge in a short amount of time by following particular paths through the pattern language.

For instance, to get an overall understanding of what generates successful study groups, take 15 to 25 minutes to read the name of each pattern, looking at each pattern's picture, and then read each pattern's problem and solution headlines, which are offset in a larger, bold font.

For a more in-depth study, scan the patterns in 15 to 25 minutes, and follow this with a patient reading of each and every pattern. As you read the body of each pattern, you'll notice that certain sentences are written in italics. This is another reading aid. If you don't have the time or inclination to read every paragraph, simply read the italics to get to the heart of the idea.

This pattern language is a living document and will improve over time. I welcome your thoughts and feedback.

Summary Of The Language

There are 21 patterns in this pattern language. They are grouped into four sections called Spirit, Atmosphere, Roles, and Customs. As you study the patterns from each section, consider the structure of this language: the patterns from the Spirit section, at the beginning of the language, help to define the study group's core, its spirit of learning. The patterns that follow this section, in Atmosphere, Roles and Customs, are all intimately tied to the earliest core patterns and serve to re-enforce them.

SPIRIT

After identifying a great source of knowledge in a subject, work to create a rewarding, intellectually safe environment for the study of that subject.

1. KNOWLEDGE HYDRANT
2. POOL OF INSIGHT
3. SAFE PLACE
4. ENDURING ENERGY
5. KINDRED COLLABORATORS

ATMOSPHERE

Establish a home for the study group that is centrally located, comfortable, aesthetically pleasing, and conducive to dialogue.

6. COMMON GROUND
7. PUBLIC LIVING ROOM
8. INTIMATE CIRCLE
9. VIRTUAL SPACE

ROLES

Lead and energize the group, come prepared, and help guide dialogues so that they are insightful and productive.

10. ENTHUSIASTIC LEADER
11. MOTIVATED MODERATOR
12. ACTIVE PARTICIPANT
13. PREPARED PARTICIPANT
14. DISTINGUISHED PARTICIPANT

CUSTOMS

Follow customs that will re-enforce the spirit of the group, piquing participant's interest in dialogues, accommodating different learning levels, making the study of literature easier, recording group experiences, and drawing people closer together.

15. OPENING QUESTION
16. SEQUENTIAL STUDY
17. AGENDA
18. SUBGROUP
19. STUDY CYCLE
20. DISTRIBUTED DIARY
21. AFTERHOURS

1 Knowledge Hydrant **



. . . where can one obtain knowledge in its fullest, unfiltered, unsimplified, form?

❖ ❖ ❖

People have a great need to acquire knowledge. They think they know where to get it, and yet one of the greatest sources goes untapped.

For nearly every subject in the world, there are people who aim to get a deep understanding of it. The trouble is, they often don't know how to obtain their objective.

With so many different learning styles, so many competing books, articles, schools, classes and tutorials in the world, it can be incredibly hard to choose the right path, the source of knowledge with the potential to provide the most important knowledge in the least amount of time for the individual student.

The world doesn't make this easy. Schools and companies and authors all have competing agendas. They hope to attract the most people by promising them what they need.

But what people really need usually isn't well known. Many of the best knowledge sources don't advertise and consequently, are often forgotten or ignored.

Such is the case with great literature. While it may be a stunning storehouse of knowledge, distinguished from all other writings by having supreme levels of knowledge, great literature is either not studied, badly re-written, or watered down by so-called educators.

This is a shame.

Imagine people running around thirsty for water. There is an open fire hydrant, spouting water into the world at a furious rate. Yet these people aren't aware of it--they don't know that what they seek is readily available in copious quantities.

So what is the meaning of their ignorance?

There may be several meanings. Great literature tends to be hard to study and understand. Unlike lesser, watered-down writings or classes, which may spoon-feed knowledge, one may struggle to understand the ideas contained in great literature. Many people either aren't prepared to do this hard work or simply don't want to.

Great literature also tends to participate in a larger dialogue. Authors of great literature commonly reference, extend, or refute ideas communicated by their ancestors or peers. This can make it doubly hard to understand their writings, since one may need to understand referenced works in order to understand the author's own work.

Finally, as great literature ages, people don't believe it will contain the "modern" knowledge they need. So even if some great book written 30 years ago contains the exact knowledge they seek, people won't find it, for they are unaware of the abundance of knowledge contained in older works of literature.

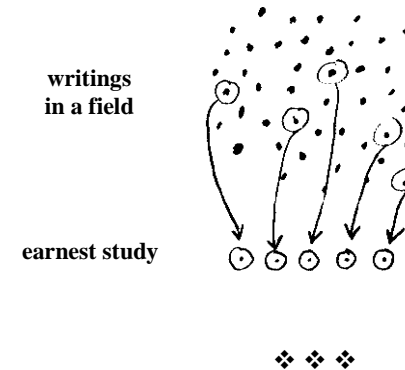
This ignorance about great literature is widespread. It exists today primarily because several important ideas about great literature have been forgotten. These include some of the following facts:

- The hard work put into the study of great literature is worthwhile because it ensures that people retain the knowledge they wish to obtain
- Great literature is much easier to understand when it is studied in an intelligent sequence—SEQUENTIAL STUDY (16)
- It is easier and more rewarding to study great literature with other people—POOL OF INSIGHT (2)

The patterns that follow will help to clarify how to effectively study great literature for the purpose of acquiring knowledge.

Therefore:

Discover the great literature in your profession or area of interest—the finest books, articles, and speeches ever written—and then begin an earnest study of these works.



So how do you find the great literature worthy of study? Ask people. Ask knowledgeable people which authors they like, what are their favorite books, what profoundly influenced them?

After identifying the works, form or join a study group—POOL OF INSIGHT (2), order the works to be studied—SEQUENTIAL STUDY (16), and compose an AGENDA (17).

2 Pool Of Insight **



. . . once you've discovered your KNOWLEDGE HYDRANT (1), it can be overwhelming to drink from it. This pattern suggests how to make the study of great literature easier and more rewarding.



There's nothing wrong with reading and studying literature on one's own. But great literature is worth knowing well, and individual study pales in comparison with the study of literature in a group dialogue.

To obtain the fullest understanding of great literature--to penetrate its meaning – it is tremendously helpful to read and study a work on one's own and then engage in meaningful dialogue on the work with others.

In dialogue, people get the chance to learn from themselves and from their colleagues. In communicating how they understand something, people may

- clarify what confused others
- expose their own misunderstandings
- reveal new ideas
- articulate that which they didn't know they knew

In the book *On Dialogue*, theoretical physicist and philosopher David Bohm said:

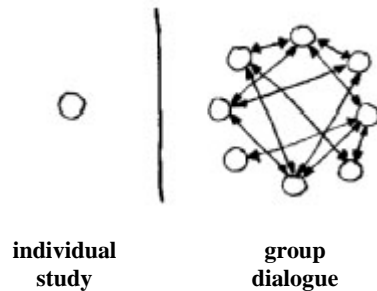
In a dialogue nobody is trying to win. Everybody wins if anybody wins. There is a different sort of spirit to it. In a dialogue, there is no attempt to gain points, or to make your particular view prevail. Rather, whenever any mistake is discovered on the part of anybody, everybody gains. It's a situation called win-win, whereas the other game [i.e. Bohm's definition of "discussion"] is win-lose - if I win, you lose. But a dialogue is something more of a common participation, in which we are not playing a game against each other, but *with* each other. In a dialogue, everybody wins. ([Bohm1996],p.7)

As David Bohm suggests, there is a spirit present in dialogues that one doesn't find in many other learning environments. Frequent meetings help sustain this spirit. When a group doesn't meet frequently, it can struggle to keep its momentum and enthusiasm; lively subjects and debates can fade between meetings, and if people miss just one meeting, they will be absent for a very long period. Many groups sustain a group's spirit by meeting weekly or biweekly.

Group study also helps motivate people to learn, especially when they are no longer officially "in school." A reading assignment every week or every other week can help individuals continue to learn while balancing work and family life.

Therefore:

Read and study literature on one's own, but discuss it with others in a regular study group. Aim to ask questions about what you don't know and explain what you do know. Your exchanges with colleagues will enrich your understanding immensely.



The best study groups are those in which individuals feel comfortable learning with others—SAFE PLACE (3).

Atmosphere plays an important role in a dialogue. Some environments promote dialogues—COMMON GROUND (6), PUBLIC LIVING ROOM (7)—and some don't.

The most enriching study happens when a group has a MOTIVATED MODERATOR (11) and PREPARED PARTICIPANTs (13). . . .

3 Safe Place **

. . . a good physical environment (COMMON GROUND (6), PUBLIC LIVING ROOM (7)) is vital for any study group. Equally vital, is the intellectual environment, which this pattern describes.



Loud-mouths, show-offs, know-it-alls and people who are overly competitive, adversarial or confrontational, can make others uncomfortable or insecure, and create an environment that is not conducive to learning, sharing or the building of ideas.

It is so important that a place of learning be a safe place. People need to feel that they can experiment, or be wrong, for almost everyone becomes uncomfortable if they fear that anything they say will be harshly criticized. When places of learning have highly critical or judgmental natures, an individual's ability to learn can easily be compromised.

In dialogue, participants must be comfortable to ask questions, even illogical, overly simple, or silly questions. It is the group's task to handle such questions in such a way that individuals aren't stifled, or embarrassed, but encouraged to continue learning.

When people are comfortable to admit that they don't understand something, real learning can happen. And when someone has the courage to admit that they don't understand, others are grateful, for often they were a bit unclear about a passage as well.

All participants within a dialogue need to help establish the safe place. Usually, it is up to the MOTIVATED MODERATOR to be especially vigilant. With great diversity in a group--people who are provocative or reserved, skeptical or generous, newcomers or veterans --it is very easy for study group sessions to become unsafe.

Treating each other with respect, despite differences in opinion, is essential in the establishment of safety, as Peter M. Senge observed in *The Learning Organization*:

Seeing each other as colleagues is critical to establish a positive tone and to offset the vulnerability that dialogue brings. In dialogue people actually feel as if they are building something, a new deeper understanding. Seeing each other as colleagues and friends, while it may sound simple, proves to be extremely important. We talk differently with friends from the way we do with people who are not friends. Interestingly, as dialogue develops, team members will find this feeling of friendship developing even towards others with whom they do not have much in common. What is happening is the willingness to consider each other as colleagues. In addition, there is a certain vulnerability to holding assumptions in suspension. Treating each other as colleagues acknowledges the mutual risk and establishes the sense of safety in facing the risk. ([Senge1990], p. 245)

Maintaining a safe place is easier if a group establishes customs. Such customs can help participants and moderators know what to do when different types of discord arise.

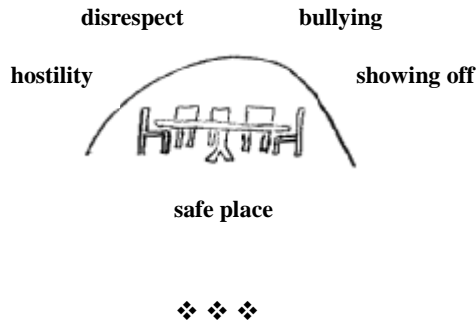
For instance, it is quite common for arguments to break out during a dialogue. This can make some people uncomfortable, while it will excite others. Generally, as long as the people arguing are remaining civil towards each other (i.e. they aren't yelling or being impolite), and as long as the argument isn't too far off the subject being studied, it can be quite instructive for a group to listen and learn. But it will help if people understand that passionate arguments are part of a group's local customs, and not something the group has decided to discourage.

One problem arises if participants don't realize that they are the ones creating the hostile, unsafe environment. These people may mean well, but may not understand how their words are affecting others.

So how does a group deal with such an individual? Usually, it is best for someone who is intimate with the group's customs to approach the individual during a short break or AFTERHOURS, to discuss their behavior and its effect on members of the group.

Therefore:

Establish a warm, tolerant, polite and focused environment in which individuals help each other and where everyone is comfortable to ask questions and make mistakes.



In practice, there will always be some level of personality conflicts or discord within a group. It can help if people get together after a session–AFTERHOURS (21), to talk about the issues. . . .

4 Enduring Energy **

. . . this pattern identifies what is needed in a study group to bring it to life, and sustain it over time.



It's fairly easy to start a study group. But keeping it going, so that members are active, dialogues are insightful, and the group is long-lived, is another matter altogether.

A study group's energy initially comes from its founder. If the founder is genuinely interested in creating a thriving, long-lasting POOL OF INSIGHT (2), to improve himself and his community, the group will start life with a powerful energy. But if the founder is merely interested in short-term gains, or personal recognition, the group will be short-lived.

In considering the long-term vitality of the group, there are many decisions to make. Where will the group meet? How long will its meetings be? What will be studied? If poor or uninformed decisions are made about these issues, a group may never take root or be long-lived. In practice, either an experienced founder, or a founder and his group, need to patiently consider the best options and what will add the most life to the group. One of the most important issues to consider is the frequency and duration of a group's meetings. The following represent best-practices:

- *Frequent Meetings*
It is difficult to maintain any sort of flow, or continuous energy, if a group doesn't meet very often. When a group is studying a body of knowledge, a month between meetings is usually far too long for people to maintain focus and enthusiasm. Therefore, have the group meet weekly or bi-weekly. These frequent meetings will allow a group to study effectively, and may lead some members to become KINDRED COLLABORATORS (5).
- *Hour Meetings*
A one hour meeting is typically not enough time for a group to have an insightful dialogue on a piece of literature. But three hours is too much

time, since most participants can't actively engage in dialogue for that long. Therefore, limit dialogues to a maximum of 2 hours, and if energy has waned significantly before that time, finish the meeting early.

- *Short Breaks*

At a certain time in a dialogue, a group's intensity, focus and effectiveness will begin to diminish. If the group doesn't take a break at this time, the quality of the dialogue may begin to deteriorate, and people will become uncomfortable. Therefore, allow for a short (ten or fifteen minute) break in the middle of a study group session, to let members reflect, chat, use the restrooms, and prepare for the next half of the dialogue.

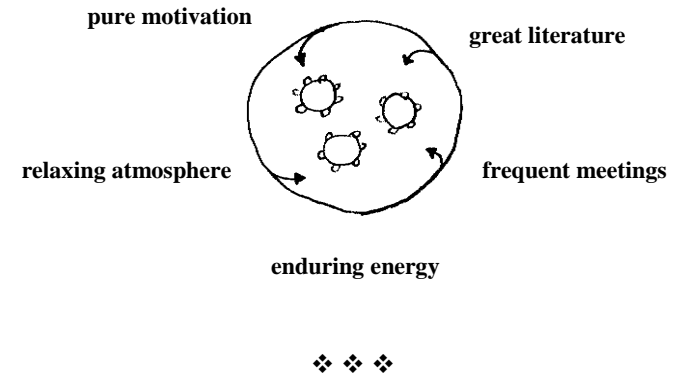
Equally important, is a group's meeting quarters, since the location and space will play a huge role in sustaining a group's energy. People need to be excited about attending a group. And yet, how can they get excited if the group meets in a dull, stuffy, maybe windowless, conference room?

Places that attract people—spacious, comfortable, energetic places—make the difference: groups bond there, people want to be there, and somehow, even the atmosphere helps dialogues gain life.

Groups also gain or lose energy based on the quality of the literature they study. If a group studies a great piece of literature, chances are they'll have a great dialogue. But if they study a poor, uninteresting piece of writing, usually, their dialogue will be lifeless and stale. Each member of a group must therefore research or review any writings which they propose for study.

Therefore:

Create study groups out of genuine enthusiasm to study a subject in-depth. Meet weekly or bi-weekly for two hours, and have a short break in the middle. Choose a meeting location where people will enjoy passing time, and study only those writings which are worthy of the group's attention.



For an ideal meeting environment, look for COMMON GROUND (6) and a PUBLIC LIVING ROOM (7).

Create SUBGROUPS (18) and STUDY CYCLES (19) to let people place their energy where they best see fit. And when group energy is low, have a DISTINGUISHED PARTICIPANT (20) join the group for an evening.

It is a custom of some groups to go out after meetings (AFTERHOURS (21)), to partake in food and drink. This social time can go far towards sustaining relationships and adding energy back to a group. . . .

5 Kindred Collaborators *



. . . When a study group has an ENDURING ENERGY (4), people get to know each other, a community forms, and there is a lasting possibility for collaborations and working relationships.



So many people dislike networking. They want to grow professionally, and they think that networking can help, but they don't know how, where and with whom to network effectively.

Many people feel isolated in their jobs. So much of their time is spent working that there is little time left to pursue what genuinely interests them.

To counter this, some try to organize study groups within their own companies. This may have some success, but often it fails due to lack of interest, or because many people prefer to be outside of work when they have any free time.

Some people go to conferences, lectures, user groups and parties in the hope of advancing their careers and themselves. Often, they end up frustrated—in reality, they don't grow professionally at these meetings, and their networking is ineffective. The trouble often results from what may be described as weak connections that develop between people who meet in large groups.

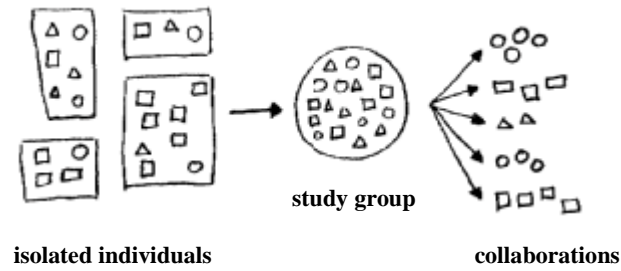
Contrast this with what happens in an intimate, frequently meeting study group. In such a group, people get to know each other over time: They learn what they like and dislike, what they excel at and where they are weak, where they are in their careers and where they'd like to go. This level of familiarity forms the foundation for a rich network that can yield very real career and collaboration possibilities.

Such an environment may be particularly useful to those who need to dynamically build effective teams to work on specific projects. As one gets to know others within a group, one can get a very good idea of who would be good for specific projects.

Therefore:

5 KINDRED COLLABORATORS

Join or form a small group that meets regularly and studies ideas that are important to you. As you get to know people, valuable, career-enhancing collaborations will develop.



Quality networking happens best when a study group is a SAFE PLACE (3) composed of diverse individuals and true peers. The best time for networking is either before a study group meets or AFTERHOURS (21). . . .

6 Common Ground **



. . . where a study group meets is nearly as important as how the study group runs and what it studies. This pattern helps direct the initial attempt at finding a suitable location.



People lack a place where they can have regular, meaningful dialogues with other people in a casual, social setting. Work and home don't provide it, and many clubs or groups also don't provide it because they meet in lifeless environments that feel like someone else's turf.

A pregnant woman reported that she was invited to participate in a regular discussion group with other pregnant women at a local hospital. While she was interested, she was repelled by the thought of spending copious time in a hospital. She also related that she was looking for something a little more human in scale, not something sponsored by a huge organization.

As this case points out, people want to connect with others but aren't willing to do so in settings that make them feel uncomfortable. Location plays a vital role in the life of a group.

In the early days of the Design Patterns Study Group, the meeting location was in a small apartment located on Manhattan's Upper West Side. This location was great for some members of the group, but not very good for others, especially those coming from New Jersey, who had long commutes and problems finding parking. The location was quickly changed to a spacious cafe in SoHo, a more central part of the city, which represented a midpoint for nearly all members of the group.



A cafe in SoHo

Howard Schultz, chairman and CEO of Starbucks, noted the importance of comfortable meeting places in his book, *Pour Your Heart Into It*:

In America, we are in danger of losing the kind of casual social interaction that is part of the daily routine for many Europeans. In the 1990s, coffee bars became a central component of the American social scene in part because they fulfilled the need for a nonthreatening gathering spot, a "third place" outside of work and home. Ray Oldenburg, a Florida sociology professor, wrote most eloquently of this need in his book, *The Great Good Places* 1989.

Oldenburg's thesis is that people need informal public places where they can gather, put aside the concerns of work and home, relax, and talk. Germany's beer gardens, England's pubs, and French and Viennese cafes created this outlet in people's lives, providing a neutral ground where all are equal and conversation is the main activity. America once had such spots, in its taverns, barber shops, and beauty parlors. But with suburbanization, they are vanishing, replaced by the self-containment of suburban homes. As Oldenburg observes:

Without such places, the urban area fails to nourish the kinds of relationships and the diversity of human contact that are the essence of the city. Deprived of these settings, people remain lonely within their crowds. ([Schultz1997], p. 120)

Shultz goes on to say that he had not anticipated people's need for meeting places when Starbucks first opened many of its early, urban stores, which offered little room to congregate.

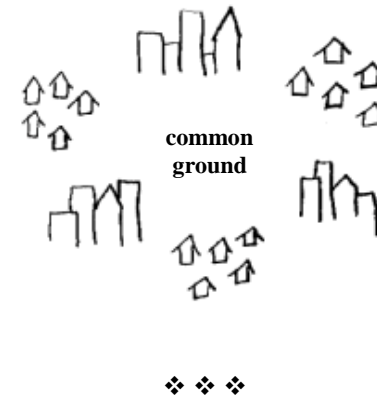
It can take time to find a place that will be comfortable and serve as common ground for a diverse group of people. But there are clearly some types of places to avoid.

For instance, when individuals who work in large office buildings decide to form groups, they often consider using one of their company conference rooms as a meeting location. This is a perfectly natural choice, since the room may be spacious, quiet, filled with white boards, available after hours, and free. However, such rooms are rarely good choices because people -- both employees and visitors to the company -- generally don't like to spend their free time in stuffy, stale, office environments.

Over the years, New York's Design Patterns Study Group has been offered meeting locations in numerous corporate offices, all of which lacked the charm, convenience, and expansiveness of the SoHo location. Since study groups meander between learning and hanging out with peers, they are best located between member's offices and homes. If they're too close to or too far away from member's offices or homes, individuals will consistently miss meetings, show up late, or leave early.

Therefore:

Hold public study groups where diverse individuals will all be on common ground. The best locations are easy for people to get to, but not too close to their offices or homes.



Once common ground has been selected, a group must find a PUBLIC LIVING ROOM (7): a comfortable, relaxing, dialogue-friendly place. . . .

7 Public Living Room *

. . . consider now the character of the study group's COMMON GROUND (6). What will the space provide to make people comfortable and foster great dialogue?



Inhospitable physical locations - stale, lifeless, badly lit, and uninviting - stifle individuals and thereby hinder lively, engaging dialogues.

Great locations for study groups resemble large, comfortable living rooms. There are various types of chairs that may be rearranged, perhaps a sofa and rugs, some lamps or other warm lighting, and windows. When people feel comfortable they forget about themselves and may freely engage in dialogue.

Some of the best locations are quiet, aesthetic places that invite reflection: a centrally located cafe, a spacious gallery or bookstore, a room with a magnificent view, or some nook or corner of a hotel or lodge.

All great meeting places exhibit certain physical patterns, which are thoroughly and beautifully described and depicted in the book *A Pattern Language* [Alexander+1977]. One pattern, called *Sitting Circle*, helps people understand how to arrange furniture to best accommodate small groups:

Place each sitting space in a position which is protected, not cut by paths or movements, roughly circular, made so that the room itself helps suggest the circle - not too strongly - with paths and activities around it, so that people naturally gravitate toward the chairs when they get into the mood to sit. Place the chairs and cushions loosely in the circle, and have a few too many.

Another pattern from *A Pattern Language*, called *Different Chairs*, helps people understand that the seating preferences of diverse people differ and that a group will be most comfortable if a space is outfitted with "a variety of different chairs, some big, some small, some softer than others, some rockers,

some very old, some new, with arms, without arms, some wicker, some wool, some cloth."

Dialogues also tend to be more alive if the lighting around the meeting tables is good. *Pools of Light*, another pattern from *A Pattern Language*, advises people to look for places that "place the lights low, and apart, to form individual pools of light which encompass chairs and tables like bubbles to reinforce the social character of the spaces which they form."



a cafe in San Francisco

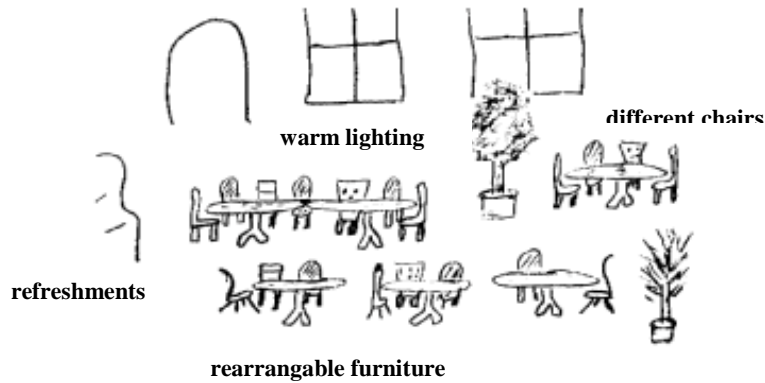
Groups that grow in numbers will need a certain amount of space. So the best locations will let groups grow by accommodating the formation of SUBGROUPS (18), seated in INTIMATE CIRCLES (8).

Great locations also allow members to show up before a dialogue begins, or linger around after it ends. And since members often arrive late, leave early, get up for snacks or use the restrooms, the best places allow traffic to flow with minimum disruptions.

Therefore:

Choose a warm, spacious establishment where people will enjoy mingling before and after study sessions, where there is comfortable, rearrangeable furniture, plenty of warm

lighting, and a variety of foods and drinks.



Some public places may be perfect in nearly every way except one: they may be too noisy at certain times of day, or you can't guarantee that there will be enough seating. Faced with these constraints, some groups may choose to reserve space or arrange to meet at a location when it closes to the public.

Communication between members will be greatly enhanced with a VIRTUAL SPACE (9)

8 Intimate Circle **

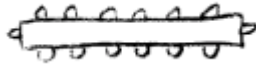


. . . this pattern helps groups understand how to arrange furniture and space within a PUBLIC LIVING ROOM to create a communications-rich dialogue environment.



Awkward seating arrangements alienate people and thwart a group's ability to work together. The best configurations allow participants to easily see and hear each other. Yet many establishments don't provide either the furniture or space to make this happen, or don't let groups rearrange the furniture.

A group's ability to have a good dialogue is closely tied to the physical arrangement of the group: if people are too spread out, too close together, or on the outer edge of an inner group, communication between participants suffers.



*people at opposite ends of table
can't communicate very well*



people are too close for comfort

The best seating arrangements let groups form rough circles or ovals, around which all participants may effectively communicate. The circle will often need to grow or contract as members arrive and depart. To accommodate this, a group will need to choose a meeting location that has many tables and chairs, which may be rearranged at will. This is important for supporting SUBGROUPS (18), particularly when they need to be formed spontaneously, due to a large influx of participants.

The author's of A Pattern Language discuss group spaces in a pattern called SMALL WORK GROUPS:

...people will feel oppressed, both when they are either working in an undifferentiated mass of workers and when they are forced to work in isolation. The small group achieves a nice balance between the one extreme in which there are so many people, that there is no opportunity for an intimate social structure to develop, and the other extreme in which there are so few, that the possibility of social groups does not occur at all.

...

In our own survey of attitudes towards workspace -- taken among workers at the Berkeley City Hall -- we found that people prefer to be part of a group that ranges from two to eight. When there are more than eight, people lose touch with the group as a human gathering. ([Alexander+1977], p. 702)

Sometimes, a group may need to reserve a room ahead of time, in order to guarantee enough space or to meet at time when it is relatively quiet.

Therefore:

Choose a location with ample room, many tables and chairs, and the freedom to rearrange the spaces to form rough circles or ovals that may dynamically expand or contract.

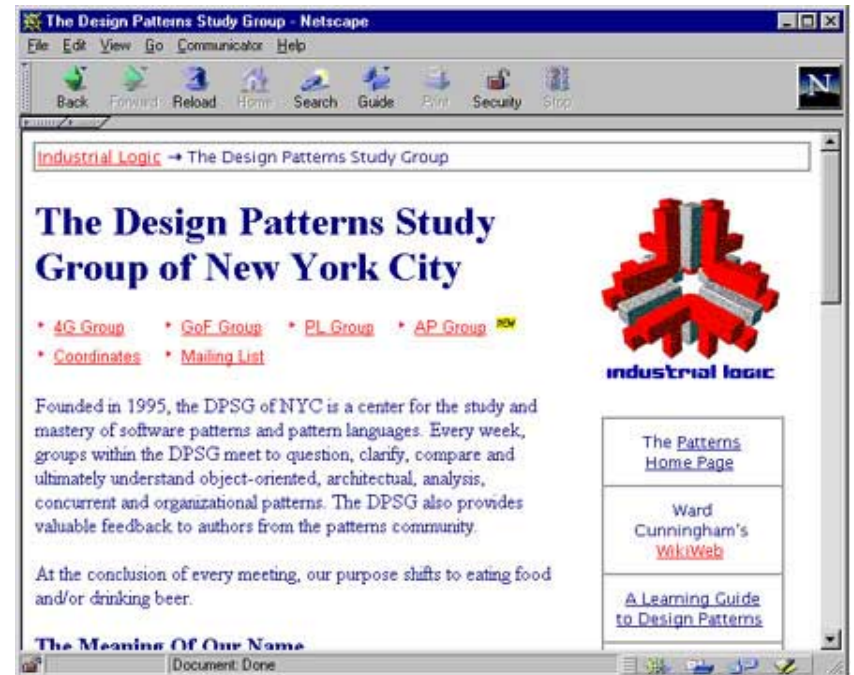


intimate circle



A *Pattern Language* contains numerous patterns that will help to complete an INTIMATE CIRCLE: WORKSPACE ENCLOSURE describes how to create an atmosphere in which people can work effectively, particularly in small groups. SITTING CIRCLE describes good physical layouts for groups.

9 Virtual Space **



. . . COMMON GROUND (6) and PUBLIC LIVING ROOM (7) established a physical center for the study group. This patterns expands that center by giving people an online gathering place.



Without an online presence, a study group will lack a cost-effective way of advertising its existence, organizing events, staying connected and attracting new members.

Since Web sites are inexpensive to create and easy to build, they are perfect for study groups. A good site will define what a group is about, who is part of the group, what the group is studying, and when and where the group meets.

The trick to building a good site, is to avoid loading the site with too much content that will regularly change, and to enlist the group's participants to maintain the content that will need routine updating.

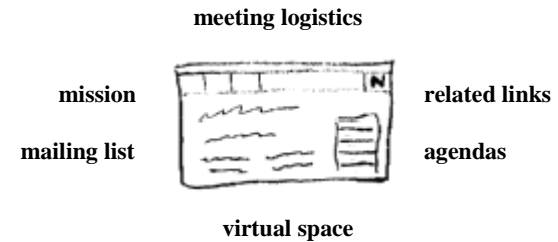
If the study group keeps a DISTRIBUTED DIARY (20) or provides feedback to authors, it is a good idea to post this material to the site, for the edification of group members, and to foster online dialogue. For conducting such dialogues, a simple, group email server or service (such as eGroups) is useful.

AGENDAs (17) are particularly helpful for members and non-members of a group and are therefore best placed on the site. A good agenda will span several months, giving people the chance to plan their schedules and study readings prior to group meetings (PREPARED PARTICIPANT (13)).

A good site will post links to related sites, along with a recommended reading list. To advertise the group, the site will need to be registered with search engines, and pointed to by other, related sites.

Therefore:

Establish an online presence where the study group's mission, activities, and DISTRIBUTED DIARIESs (13) are posted, where members may continue dialogues, or chat, and where prospective members may learn more about the group.



A group's virtual space need not be fancy, ought to load quickly (i.e. for people with slow connections to the Internet) and be easy to navigate.

10 Enthusiastic Leader **



. . . a study group needs leadership to have an ENDURING ENERGY (4) and be a SAFE PLACE (3). This pattern describes what a leader will do to produce these qualities.



When a group doesn't have a leader who is passionate about the subject and determined to nourish and maintain its energy and culture, a group can languish, and possibly not survive.

A group needs someone who can see what a group needs and synthesize the interests and needs of diverse members.

This isn't easy to do.

The best leaders are those who are genuinely enthusiastic about a group's mission. Such individuals will lead by example and seek to make the group thrive, through continuous improvement.

Good leaders will help new members learn how the group runs and what it expects from members. They will be receptive to individual problems and work to resolve them.

Leaders will help ensure that AGENDAs (17) are kept up to date, and that the readings being selected are worthy of the group's attention.

To inspire a group, a leader may plan special events at which authors or leading scholars visit and participate in dialogues (DISTINGUISHED PARTICIPANT (14)).

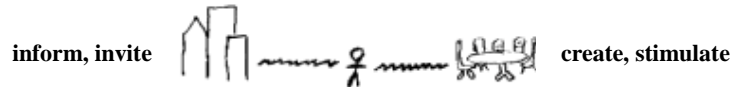
To help keep a group informed and to attract new faces, a leader will help produce an informative Web site–VIRTUAL SPACE (9)–and will encourage others to invite new members to the group.

Should other groups attempt to subsume the group, the leader will step in to either prevent a take-over or to explore the idea with the group.

If a group's meeting location is no longer working for a group, the leader will work with others to help find a more suitable location.

Therefore:

Lead study groups by example and with enthusiasm. Make them places where people want to be, and invite the greater community to participate. Energize members with stimulating events, virtual dialogues, and seek to continuously improve the group by listening closely to member's ideas.



Leaders sometimes can't lead for various reasons. If this is short-term, it usually isn't a problem. But if the group becomes leaderless for some time, someone must step into the role. An ACTIVE PARTICIPANT (12), who is already enthusiastic about a group, is usually a good choice. However, it is always best if individuals volunteer for roles. . . .

11 Motivated Moderator **



. . . the way a dialogue is directed plays a huge role in the educational experience of participants. If it's done poorly, the dialogue will be neither a POOL OF INSIGHT (2) nor a SAFE PLACE (3). This pattern describes what kind of direction will help produce valuable educational experiences.



Without a moderator, dialogues may wander aimlessly, arguments may erupt, people may talk on top of each another, and a group may fail to ever explore an author's deeper meanings.

Most people come to a dialogue hoping to gain a better understanding of a reading. This objective is not something that groups naturally follow. In fact, leaderless dialogues often seem to deteriorate into tangential discussions or multi-person side-conversations.

They also get caught up in trivialities. People choose passages and spend too much time talking about them, and not enough time trying to understand the larger issues in a reading.

Then, there are those who don't come prepared. These people have a tendency to speak about related works which they have read. Meanwhile individuals who did prepare, can't discuss the reading with those who did not prepare, and consequently learn very little.

Finally, as we noted in SAFE PLACE (3), unproductive behavior can easily surface during a dialogue, and if unchecked, can easily hinder people's ability to communicate at all.

Effective moderation adds some necessary direction to a dialogue, and installs a safety net.

When it's done well, it is done with a light touch: The moderator guides the dialogue where necessary, but doesn't intervene too much. Even if two people have a passionate argument, a good moderator will not interfere, if he perceives that the argument is instructive to the group.

Highly experienced moderators can truly make dialogues great. This is especially true if the individual is experienced in their field, adept in the art of moderating, and knowledgeable about the literature over which they moderate.

Members of a group must ensure that they are familiar with the role of moderator before volunteering to play the role. The following practices define what good study group moderators do:

- *Prepare thoroughly*
When a moderator doesn't prepare thoroughly for a session, when he or she doesn't read thoroughly, or discover important questions about a reading, or understand a moderator's responsibilities, the quality of a dialogue may be compromised. Therefore, moderators must prepare thoroughly before sessions and understand how to effectively moderate.
- *Ask the opening question*
Asking challenging, penetrating questions about a reading is essential to establishing engaging, enlightening dialogue. Therefore, moderators must discover important questions, and ask and re-ask these questions at the beginning and throughout a session—OPENING QUESTION (15).
- *Resuscitate deteriorating dialogues*
Dialogues can deteriorate easily: they can slow to a crawl, fail to be engaging, get way off track or become too argumentative. Therefore, moderators must promptly diagnose problems and resuscitate dialogues accordingly.
- *Handle side conversations*
A group may effectively participate in only one discussion at a time. Therefore, side conversations must promptly be quieted or politely postponed.
- *Refocus by reading*
Inattention to an author's words can produce lengthy, unproductive, off-topic conversations or can lead to wayward arguments that would cease to exist if a group merely studied a relevant passage.



Therefore, to refocus a group on an author's content, moderators may read significant passages out loud.

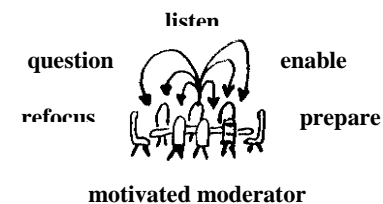
- *Let people speak*
Active participants (i.e. people who talk a lot) or veteran members of a group, can sometimes make it hard for less active, or newer members of a group to effectively participate in a discussion. Therefore, when participants struggle to join a dialogue or get a word in edgewise, moderators must step in and give these individuals opportunities to be heard.
- *Challenge groundless criticism*
Non-specific or detail-free criticism, like "I just didn't like it", fails to enlighten anyone and isn't helpful to a dialogue. Therefore, moderators must challenge groundless criticism, often by asking individuals what exactly they disliked.
- *Rotate Moderators*
A moderator who really knows a particular piece of literature and also knows how to moderate, is a lot better than a moderator who only knows how to moderate but doesn't know the literature. Therefore, rotate moderators, particularly when individuals are expert in various readings, but also to give others a chance at playing the role.
- *Background Requirements*

It's great if everyone participates in a dialogue, provided that everyone is on the same page: if an individual is clearly way over his or her head, it may mean that the individual needs to catch up to the group by studying some previous papers or books. Therefore, moderators must gauge whether participants are dragging a group down with unrelated or unnecessary questions, and if they are, the moderator needs to politely tell the participant to do some homework or form or join a SUBGROUP (18).

- *Elucidation Statement or Questions*
If a part of a group simply isn't understanding something, and it is holding back the rest of the group, or the misunderstanding is leading to more confusion, something needs to be done to clarify the confusion. Therefore, moderators must be aware of what is confusing people and either ask questions that will help clarify the point or clearly explain the point.
- *Politeness & Patience*
Rude behavior within a study group must never be allowed. Therefore, the moderator must make the peace, and get all members to understand that all members need to respect each other, regardless of whether or not they agree.

Therefore:

Moderate dialogues by asking penetrating questions, keeping dialogues focused, balancing diverse personalities, and helping group's increase their understanding. Give all members a chance to moderate, but let them choose when they want to play the role.





It can take time to become adept at moderation, since it involves actively speaking, listening, and observing. One must also prepare thoroughly, if one is to make the proper decisions about when to intervene in a dialogue or dispute.

12 Active Participant **

. . . the ENTHUSIASTIC LEADER (10) works to make a study group an active learning environment. But they can't do it alone. This pattern describes what each participant must do to make the study group work for them.



Anyone who is a member of a study group, or wants to join one, can find something lacking in an existing group: the meeting location, the number of people who attend, the literature being studied. Few of these things are incapable of change. However, too many people fail to realize that they can actively change a group, helping mold it to meet their needs.

This is really an issue of empowerment. Group participants must understand that a study group is a tool, their tool, which can be applied to their needs, if it isn't already doing so. If they don't understand this, or if they cannot make changes, these people won't be part of a group for long. The situation gets more complex as groups mature. The problem is that newer and older members tend to have diverse needs. If a group can't accommodate their needs, it will only be able to satisfy a certain set of people.

Each group is really shaped and managed by both its ENTHUSIASTIC LEADER (10) and its regular participants. If the leader and the participants work together, they can make the group a powerful educational center for every participant.

Being active in a group, means making the group work for you. To do this, it helps if certain customs are in place.

For instance, one individual in a group needed to become knowledgeable in a certain subject. The study group had already devoted much time to this subject years earlier. Yet, this individual knew that he could form a SUBGROUP (18) to begin a new study of this subject. Working with the

group's leader, the two planned an AGENDA (17) for the study, informed group members and people in the larger community of the new subgroup, and a few weeks later, the study began.

Some groups don't have such customs in place, and this makes it harder for participants to facilitate change. The following story describes the experience of two people in a group:

The individuals, regular attendees of a study group, found that nearly everyone who came to the group, did not study the readings prior to the meetings. These individuals prepared thoroughly before every session, so when they came to the group each time, they found themselves answering the most basic questions of other participants. In effect, they were teaching, they were not participating in a meaningful, mutually insightful dialogue. This did not appeal to them. So a few months after joining the group, they left, and went off to form their own group, closer to their neighborhood, with people who came prepared.

When people come to a study group and have not studied the reading prior to a session, everyone loses. In the above story, the two individuals felt compelled to go somewhere else primarily because the group lacked PREPARED PARTICIPANTs (13).

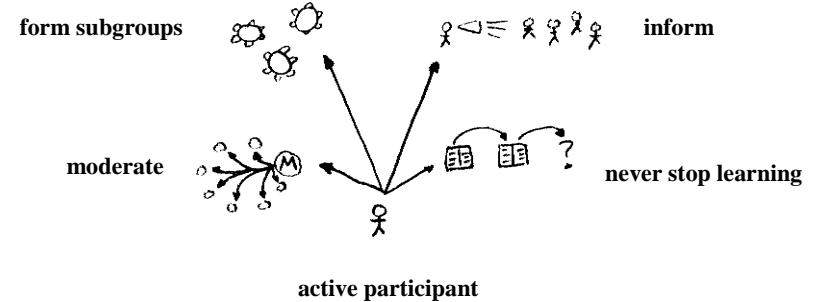
Had the group supported SUBGROUPs, (18) perhaps these individuals could have found a way to continue to attend, albeit by forming a subgroup within the group. But in their case, because the group's meeting location did not even represent COMMON GROUND (6), they had additional reasons to go elsewhere.

Being an active participant doesn't just mean getting your needs met. It also means helping others to get their needs met - and this can have a tremendous effect on the group's lifespan.

For instance, to help newer members of a group understand how to play the role of MOTIVATED MODERATOR (11), experienced members of a group can spend a few sessions with a new group to show them how it is done. Over time, such practices will help foster a very strong study group.

Therefore:

Actively and patiently shape a study group by seeing to it that the group meets your needs. Work with the group's leader to introduce change, and create customs, like SUBGROUPs, (18) to make it easier for the group to accommodate diverse needs. Actively help others, particularly newer members of a group, so that the group meets their needs and so that they become valuable participants in the larger group.



Active participants are normally PREPARED PARTICIPANTs (13), who routinely play the role of MOTIVATED MODERATOR (11). These participants help to broaden a study group's offerings through the formation of SUBGROUPs (18) and meaningful STUDY CYCLEs (19)

13 Prepared Participant **



. . . people learn the most in dialogues when they have exceptional literature to study—KNOWLEDGE HYDRANT (1), when the group has a MOTIVATED MODERATOR (11), and when everyone prepares thoroughly before meetings. This pattern identifies what it means to prepare thoroughly and what may be done to help people do it.



When individuals don't study prior to a dialogue, they either add nothing to the dialogue, or add too much. The unprepared participant may ask questions that are off-track or elementary or may contribute ideas that misguide rather than further a productive inquiry.

What does it mean to prepare thoroughly for a dialogue?

If a group chooses to study some piece of literature, a participant who thoroughly prepares will actively read and note:

- what they did and did not understand
- what they thought were key points
- what they did not agree with
- what ideas related to other writings
- how the work could be improved

Reading in this way is not only essential for effective participation in a dialogue, it is also requisite if one wishes to learn from literature.

Learning from reading is so natural a part of what we do everyday, that few of us would consider that we could actually do it better. Mortimer J. Adler helped the world understand that they could amplify the act of reading in his landmark book, *How To Read A Book - The Art Of Getting A Liberal Education*. Adler explains that there is an art to reading, and gives precise and passionate guidance on the subject. He wrote:

If we consider men and women generally, and apart from their professions or occupations, there is only one situation I

can think of in which they almost pull themselves up by their bootstraps, making an effort to read better than they usually do. When they are in love and are reading a love letter, they read for all they are worth. They read every word three ways; they read between the lines and in the margins; they read the whole in terms of the parts, and each part in terms of the whole; they grow sensitive to context and ambiguity, to insinuation and implication; they perceive the color or words, the odor of phrases, and the weight of sentences. They may even take the punctuation into account. Then, if never before or after, they read. ([Adler1940], p. 14)

Of course, Adler doesn't advocate reading everything with this intensity. The point is to read dense or complex works with the same precision and clarity.

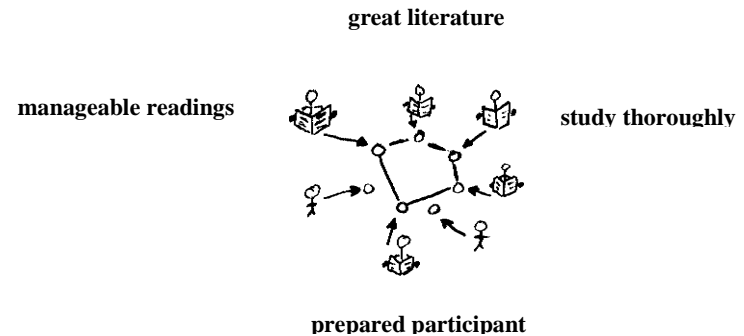
Now it is not common for all participants within a dialogue to prepare thoroughly. So what does a group do when an unprepared participant is thwarting a dialogue? Since dialogues can handle only so many superfluous contributions before they begin to sour, prepared participants need to be vigilant and assist a dialogue's MOTIVATED MODERATORS (11) in assertively keeping things focused, civil, and productive.

It is normal for people to lose a degree of motivation over the many weeks, months and years that a study group meets. To keep people inspired and motivated, it helps if individuals can volunteer to play leadership roles that will encourage them to prepare energetically. Some groups let individuals choose to be moderator for particular sessions. This role requires that the individual become most knowledgeable about a reading.

Another technique, which is far from optimal but sometimes necessary for groups with busy professionals, gives people time to read and discuss passages when the group meets. This does not usually give a group a chance to get a deep understanding of a reading, but it can be a way to launch a dialogue if few have had time to prepare.

Therefore:

Study literature thoroughly prior to each study session. Select great literature for study since people will be more motivated to study it over lesser works. Make each reading assignment manageable -- not too small or too large, but commensurate with a group's abilities and the density of each reading.



It can be a challenge for groups to choose the right amount of material to study for each session. Few people will finish a large reading, but a small reading may not contain enough content for a two-hour dialogue. Carefully monitor how people are doing to gauge the proper lengths for readings. And be careful not to make this a formula since some readings will be more dense than others.

14 Distinguished Participant

. . . great authors are the primary educators in a POOL OF INSIGHT. PREPARED PARTICIPANTs come next - for they help each other learn during the dialogue. This pattern identifies the type of individual who can excel within a dialogue and thus be a great resource to a group.



Individuals who are distinguished in their fields often lecture to large audiences. These lectures tend to be far less educational—for the lecturer and the listeners—than a good dialogue.

It is rather amazing that the world has fallen into the trap of thinking that important people are supposed to lecture at large audiences, while less important people listen. Lecturing does have its purposes, but it is a very crude means of communicating knowledge when compared with dialogue.

Veteran educators Dani and Jerry Weinberg are fond of a quote from a friend who once described the lecture method as "a way of getting material from the teacher's notes into the student's notes--without passing through the brain of either one." ([Weinberg1999], p. 1)

Contrary to most practices, if a lecturer really has something important to say, he would be better off giving his notes to a group, which could study them and then join together in a meaningful dialogue. The outcome of such a dialogue would be far more educational, and less boring, than any lecture, particularly if the group has a MOTIVATED MODERATOR (11) and PREPARED PARTICIPANTs (13).

For study groups, it is optimal if a distinguished individual comes to participate in the group's dialogue as an equal member. The Design Patterns Study Group had a wonderful experience with this when a celebrity was invited to attend the group inognito:

A well-known author and columnist named John Vlissides, arranged with the DPSG's ENTHUSIASTIC LEADER (10) to show up on a certain evening unannounced. John ambled into the group's PUBLIC LIVING ROOM (7) and was casually introduced by the leader as a new member of the group. He took his seat around the circle and entered the dialogue. After 10 or 20 minutes, it became clear to many that this was quite an astute new member of the group. John was politely correcting people, elucidating complex ideas, and generally tossing off knowledge on the subject.

This piqued the interest of a fellow named Sterling, a long-time member of the group, who happened to have a trade magazine with him. Casually opening his magazine to a certain column, Sterling compared the picture of the columnist with the new guy saying all the smart stuff. A match! But the leader, noticing Sterling's discovery, winked and covered up the magazine. When the meeting finally concluded, the leader took great joy in announcing just who John really was, whereupon signatures were gathered and the entire group took John out for food and drinks.

Now it is true that lectures can reach much larger audiences than dialogues, so lectures have their place. However, the best lectures leave plenty of time (nearly 50%) for post-lecture dialogue. Some call this period the Question & Answer section. This period can be quite educational to people, but unfortunately, most lecturers don't factor in time for this. In addition, when they do try to have post-lecture Q&As, they neglect to rearrange the lecture-oriented furniture to accommodate group dialogue—INTIMATE CIRCLE (8).

On the occasion of a visit from a distinguished person, a group may decide to create a less intimate circle, but one which can accommodate everyone within the group. This is a trade-off - it gives everyone a chance to participate, but also makes people uncomfortable since the circle may be too large.

Another way to accommodate larger study groups is similar to what popular rock groups do when they decide to hold concerts in small, intimate places. They schedule multiple concerts in these small arenas, over numerous days. For study groups, it would be ideal if a group could have the distinguished

person come to a series of dialogues, to give everyone a chance to spend time with the individual, in a smaller, more intimate dialogue.

Therefore:

Invite distinguished people to attend a study group and participate in dialogue. Such individuals will energize the group, and help foster great dialogues. Let everyone in a group have an opportunity to participant in dialogue with such an individual, either by forming larger-than-normal circles, or by scheduling multiple study sessions over the course of weeks or months.

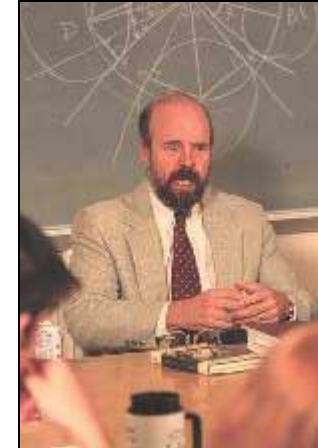


A group's ENTHUSIASTIC LEADER (10) and/or its ACTIVE PARTICIPANTs (12) may periodically invite celebrities to attend a dialogue. It can be surprisingly easy to get important people to attend such sessions when you persuade them that they may learn something through such an exchange of ideas.

When a celebrity attends a study group, the entire group rather than one particular subgroup may wish to participate in the dialogue. This can be a challenge, since dialogues function best within smaller INTIMATE CIRCLES (8). Nevertheless, this occasional trade-off is worthwhile.

Further dialogue can continue when everyone takes the celebrity out AFTERHOURS (21). . . .

15 Opening Question **



. . . the POOL OF INSIGHT (2) provides a way for people to learn more by learning together. This pattern completes that pattern by providing a way to inspire and puzzle participants, thereby stimulating them to think on a deeper level.



Asking an opening question at the commencement of a dialogue comes from an age-old tradition that is still practiced at schools like Oxford University and St. John's College.

The following story illustrates the importance of the opening question:

The summer before my first year at St. John's College, I was required to read Homer's Iliad for a freshman seminar. I was hiking that summer and would read Homer by flashlight before I went to bed each night. When I had finally finished the epic tale of Achilles, I remember that I was not all that impressed: I essentially considered the book to be just a war novel.

When school started, I attended my first seminar on a warm evening in August. Our professor, seated at a large, oval table with us, asked the opening question.

This question took several minutes to ask and raised issues about man's fate vs. his own free will. A small passage was read about a shepherd and his sheep, safely viewing the war from a hillside. I had not remembered this passage, but now, as the professor read, I began to be aware of a fantastic connection between this passage and the issue of fate vs. free will. By the conclusion of the opening question, I knew that I had only touched the surface of the Iliad and was ravenous to learn more.

A dialogue is set in motion by an opening question. When the question is good—when it reveals subtle meanings, inherent contradictions or far-reaching consequences—people within a group can become aware of what they don't understand, thereby paving the way for learning.

In addition, just as a POOL OF LIGHT [CA] physically unites individuals, an opening question unites them intellectually. In other words, it gets everyone thinking and communicating their ideas about a meaningful subject.

Good opening questions aren't easy to formulate: compelling questions develop out of significant study of a work and continuous revisions.

Mortimer Adler, the famous University of Chicago professor who authored *How To Read A Book* and edited the *Great Books of the Western World* series, conducted seminars that began with opening questions for well over half a century. He explained the nature of these questions as follows:

...They should be questions that raise issues; questions that raise further questions when first answers are given to them; questions that can seldom be answered simply by Yes or No; hypothetical questions that present suppositions the implications or consequences of which are to be examined; questions that are complex and have many related parts, to be taken up in an orderly manner. ([Adler1983], p. 175)

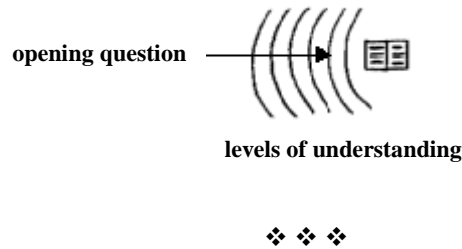
Who asks the opening question?

For the best results, an individual who has great experience in a subject or with a particular reading will be most qualified to ask the question. However, the process of formulating and asking the question is so instructive, that all members of a group ought to be encouraged to take a turn.

After the question has been asked, an individual's work isn't done: they must ensure that others have listened to and understand the question, even if it involves rephrasing the question or offering an example to help illustrate it; they must also respond to participant's theories or answers and steer the dialogue should it go astray. These types of responsibilities are best carried out by a group's MOTIVATED MODERATOR (11). Thus, the asker of the opening question will often moderate a dialogue as well.

Therefore:

Begin dialogues with an opening question or series of questions that penetrate into the heart of a reading, puzzling and/or challenging participants, and leading a group to search for a work's most profound ideas. Let people volunteer to ask the opening question, and encourage them to record their questions to improve them over time.



Difficult questions that may arise during a dialogue are often the seeds for great opening questions. It's important to understand that one's initial opening questions may not be perfect - it simply takes time to improve them.

It is also important to note that some groups may not be ready to even think about an opening question before they understand some basics of what an author is communicating. That's fine. A group can come back to the opening question as the dialogue proceeds. . . .

16 Sequential Study **



. . . after a body of literature has been selected for study (KNOWLEDGE HYDRANT), the literature will be much easier to understand if it is studied chronologically.



Because authors refute each other, extend each other's ideas, and subtly reference each other, readers can easily miss or misunderstand important connections when literature is not studied in chronological order. Some literature may be quite unintelligible if is studied out of order.

It's amazing to learn just how important sequential study is.

At St. John's College, students spend four years studying the Great Books of the Western World. Freshman year begins with a study of the ancient Greeks and by Senior year, students are studying the modern classics. As one reads each of these works, which span a vast period of time, there are countless references to older works--Homer's poetry, Aristotle's logic, Plato's paradoxes. Many of these references play pivotal roles in classic writings. But they cannot be sufficiently understood if the context in which they were originally communicated is not understood.

Mortimer Alder spoke of the importance of sequential study in *How To Read A Book - The Art Of Getting A Liberal Education*. He wrote:

Frequently, in lecturing about education, I refer to the great books. Members of the audience usually write to me later to ask for a list of such books. I tell them to get...the list printed by St. John's College, in Annapolis, Maryland...Later, I am informed by these people that they have great difficulties in reading the books. The enthusiasm which prompted them to send for the list and to start reading has given way to a hopeless feeling of inadequacy.

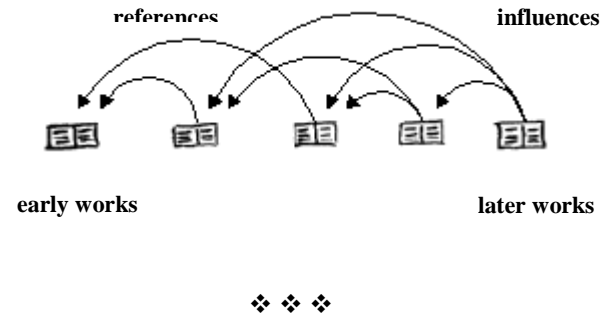
[One reason] is that they think they should be able to understand the first book they pick out, without having read the others to which it is closely related. They may try to read The Federalist Papers without having read the Articles of Confederation and the Constitution. Or they may try all these without having read Montesquieu's The Spirit Of The Laws, Rousseau's The Social Contract, and John Locke's essay Of Civil Government.

Not only are many of the great books related, but they have actually been written in a certain order which should not be ignored. A later writer has been influenced by an earlier one. If you read the earlier writer first, he may help you understand the later books. ([Adler1940], p. 128)

New members of groups often need their opportunity to study the early or core books in a subject. SUBGROUPs (18) make this easy. New members can join subgroups, while senior members study advanced writings in the their subgroup.

Therefore:

Study literature chronologically for maximum comprehension: the order will help illuminate how authors were influenced by each other, thereby rendering references to older works more intelligible.



After chronologically ordering literature, a group may create intelligent AGENDAs (17) and STUDY CYCLEs (19).

17 Agenda *

<p style="text-align: center;">September 21</p> <p><u>Understanding and Using ValueModels</u>, by <i>Bobby Woolf</i>, in Pattern Languages of Program Design ("PLOP I"), edited by James O. Coplien & Douglas C. Schmidt (Addison-Wesley).</p>
<p style="text-align: center;">September 28</p> <p><u>Reactor -- An Object Behavioral Pattern for Event Demultiplexing and Event Handler Dispatching</u>, by <i>Douglas C. Schmidt</i>, in Pattern Languages of Program Design ("PLOP I"), edited by James O. Coplien & Douglas C. Schmidt (Addison-Wesley).</p>
<p style="text-align: center;">October 5</p> <p><u>Proposal Based Architecture – Intermediary Objects for Transactional Systems</u>, by <i>John Tibbetts</i>, with links to other articles about the pattern.</p>
<p style="text-align: center;">October 12</p> <p><u>Tree With History - A Pattern for Dealing With Transaction Structures</u>, by <i>Francis Anderson</i>.</p>
<p style="text-align: center;">October 19</p> <p><u>Transactions And Accounts</u>, by <i>Ralph Johnson</i>, in Pattern Languages of Program Design 2 (PLOP II), edited by John M. Vlissides, James O. Coplien & Norman L. Kerth</p>
<p style="text-align: center;">October 26</p> <p><u>Inventory And Accounting</u>. Part I, by Martin Fowler, in Analysis Patterns - Reusable Object Models, Chapter 6</p>
<p style="text-align: center;">November 2</p> <p><u>Inventory And Accounting</u>. Part II, by Martin Fowler, in Analysis Patterns – Reusable Object Models, Chapter 6</p>

. . . no study group or SUBGROUP (18) is complete without an agenda. The agenda outlines a group's goals, allows members to prepare early and gives people the chance to choose which meetings they can attend.



Without an agenda, a group will feel lost: members will not be able to order their schedules, and people will not have enough time to properly prepare for meetings.

If you don't have an agenda, it is very hard to maintain any sort of regular membership in a study group. People like to see the whole picture: where a group is going, and what it has chosen to study.

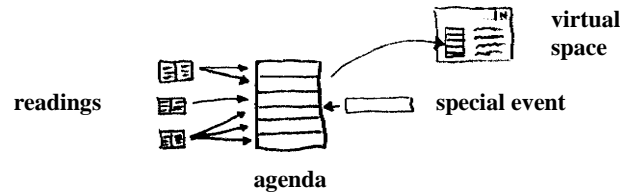
Long agendas that span several months are best, since they present a group's goal and lay out exactly how the group will get there. In addition, with a long list of readings to study, people may get a chance to scan the list and suggest additional readings that the group may study.

It should be easy to add entries to an agenda. In general, you'll want to have an easy way to notify individuals of changes.

Sometimes an author may be in town and that is usually a great time for a group to send out an invitation –DISTINGUISHED PARTICIPANT (14).

Therefore:

Create and publish an agenda with at least 3-6 weeks worth of planned meetings. Allow the agenda to be revised, with some lead-time, to accommodate special, unexpected events or the study of newly discovered works.



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The best agendas are ordered such that groups will study literature in sequence—SEQUENTIAL STUDY (16). When groups finish studying a body of literature, newer members of a group, who weren't around when the works were originally being studied, may want their chance to study the works. This can be accomplished by creating STUDY CYCLES (19) and SUBGROUPS (18).

18 Subgroup **

. . . How does a study group deal with a large influx of participants, or members who want to study different subjects, or a slowdown in membership? Subgroups provide a way to intelligently handle these issues, without compromising intimacy or losing effectiveness or stifling the interests of participants.

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Study groups can reach a size where they are no longer effective. In addition, not everyone within a study group is at the same level or knowledge, or is interested in studying the same subjects.

A subgroup is a part of a study group, created so that individuals may concentrate on specific readings, subjects or STUDY CYCLES (19).

Study groups may be composed of sequences of subgroups which meet at the same time, or at different times. To meet at the same time, a study group will need a fairly spacious PUBLIC LIVING ROOM (7), capable of forming multiple INTIMATE CIRCLES (8). Subgroups that meet concurrently can join up as a group AFTERHOURS (21). Some study groups choose to have subgroups meet at different times, so that members may participate in some or all of the subgroups.

Every session of a subgroup will need its own MOTIVATED MODERATOR (11).

The following list provides some reasons for forming study groups:

- *Too many people show up*
The quality of a dialogue may deteriorate if a group gets too large: people who are generally comfortable talking may become shy around so many other people, or the INTIMATE CIRCLE (8) may need to grow so large

that folks won't be able to see or hear one another. Therefore, when a group grows beyond a reasonable size (e.g. 10 people), consider forming an impromptu subgroup.

- People want to study different literature
As study groups mature, older members advance beyond foundational literature into more specialized or current literature that rests upon the foundational literature. Without understanding this foundational literature, newer members of a group can feel lost or intimidated, and their participation may actually hinder an advanced dialogue. Therefore, to accommodate different levels of experience, form ongoing subgroups that focus on different books, subjects or STUDY CYCLES (19).
- *Someone may want to study something relevant that no one else is studying*
If this happens, an individual may feel discouraged, believing that it won't be possible to engage in an ongoing dialogue without interest from others in the group. The opposite is the case. Therefore, encourage the individual to form a subgroup, create an AGENDA (17), publicize the new subgroup's existence (using the group's VIRTUAL SPACE (9)), and begin the study process alone, while the other subgroups are meeting.
- *A study group needs new members*
As a study group matures, newer members will want to join, but will have a hard time participating if the group is already studying advanced or specialized literature. Therefore, create subgroups of varying levels, which newer members may join to become part of the larger study group.

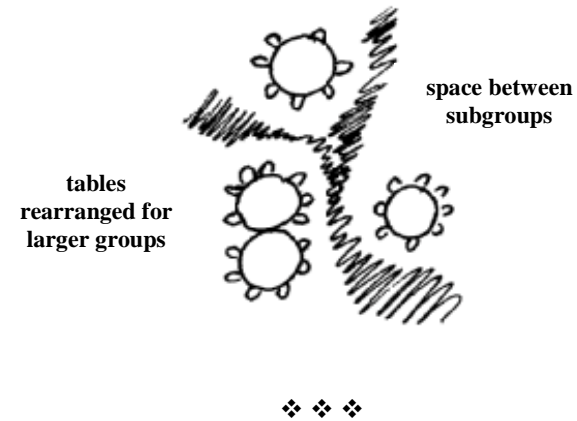
New study groups often must decide when the time is right to begin creating subgroups. If there aren't many members attending the initial group, it may be hard to justify creating a subgroup, which could possibly splinter an already small group. On the other hand, individuals within the study group's community may not be joining the study group simply because the group is already studying advanced literature.

The DPSG formed its first subgroup after about a year of continuous weekly meetings. The new subgroup was well publicized on the DPSG web site (VIRTUAL SPACE (9)), and it brought many new faces into the DPSG. Newer members eventually become veterans, who made way for yet even

newer members. A key to making this work is to offer STUDY CYCLES (19).

Therefore:

Form subgroups when groups become too large or when members are interested in different tracks of study. Give each subgroup an agenda, and publicize each group to attract new members. Let everyone choose which subgroup they wish to attend.



Subgroups work best when they each have their own AGENDA (17), and when every session has a MOTIVATED MODERATOR (11). It is important to place enough space between each of a study group's subgroups-INTIMATE CIRCLE (8).

Since people in different groups can easily get alienated from each other, it is often good if the entire study group goes out together AFTERHOURS (21).

19 Study Cycle **

. . . the group has chosen the literature to study, ordered the literature chronologically (SEQUENTIAL STUDY), and created a group AGENDA. Now the group must consider how newer members will get their chance to study selected works.



Veteran members of a mature group tend to study advanced pieces of literature. This can be a problem for new or prospective members, who need to study earlier, foundational works, before they may contribute meaningfully in dialogues on advanced topics.

Study cycles are primarily created for newer members of a group. Newer members need to study literature in the same chronological order as veteran members. Study cycles give them a way to do this, letting them eventually graduate to other cycles, centered around later or advanced topics.

Study cycles can also be useful for groups that want to study some special subject for some period of time. Perhaps only a fraction of the group is interested in this study. That small group can go off, create the study cycle, go through the agenda, and then move on, leaving the study cycle for others who may wish to go through it in the future.

Good study cycles take time and care to create. The trick is to choose readings that fit together nicely and to formulate and record good OPENING QUESTIONS (15) for each reading.

Study cycles are often created around specific themes, and may contain readings of primary literature followed by readings of commentary on that literature. For the Design Patterns Study Group of NYC, study cycles have included blocks of sessions devoted to the study of large object-oriented frameworks.

Without study cycles, it is hard for people who miss certain readings to ever get the chance to read and discuss them with others. However, with a study cycle, people can simply wait till a new cycle begins, and then get their chance to study with others.

The DPSG has built up a study cycle within a SUBGROUP (18), which studies a single, classic book. The group ordered the 23 readings to make the concepts as easy to understand as possible. Each group which studies this cycle, takes 23 weeks to get through it. After that, there is a 2-3 break, and then new members may join the subgroup, and begin the study cycle.

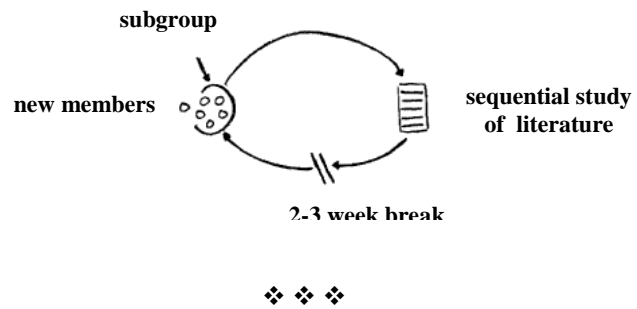
It is interesting to learn why the DPSG formed this study cycle. The DPSG's senior members realized sometime after they had studied this classic book, that new members of the group were not getting their chance to study the book, with other, in a dialogue. This was limiting the number of new members who would join the group, since many of them needed to study the classic book, before they could go on to study further works—SEQUENTIAL STUDY (16). The study cycle and subgroup were thus added to accommodate new members, and make the larger study group a more valuable resource to the community (in this case, New York City).

It is important to note that not everything a group studies will need to be in a study cycle. Many works will not be worth studying again, and so will simply be part of a group's AGENDA.

Therefore:

Package readings into collections, which a group of individuals may undertake to study. Combine the study cycle with a SUBGROUP, which will repeat the cycle over and over as long as there is interest either in the group, or with individuals who wish to join the group.

19 STUDY CYCLE



Study cycles take time to create, but are well worth the effort. You don't have to get them perfect the first time. Experiment to continually refine the cycle. Get feedback on each cycle or sequences within the cycle, using a DISTRIBUTED DIARY (20). . . .

20 Distributed Diary



. . . The POOL OF INSIGHT (2) and VIRTUAL SPACE (9) provide centers where a community may assemble, learn and grow. This pattern enlarges and strengthens that community by giving it the fruits of study group sessions.



Study groups generate valuable ideas, questions and commentary. If this output is not recorded and made public, only attending group members will benefit, leaving everyone else (including members who were not able to attend a session) with nothing.

To present and non-present members of a group, the outside public (including similar study groups), and to future members of a group, the ideas that surface during a study session can be quite valuable.

The trouble is, these ideas tend not to be recorded.

The reasons for this usually involve some combination of the following:

- A group may not understand that what they are saying, asking, thinking is worth recording
- A group may have difficulty finding regular volunteers who will record what goes on
- A group may find that when ideas are recorded, important ideas aren't captured

Once a group realizes that what they are talking about is worth capturing, the question is, how can the group sustain the act of actively and accurately recording their sessions?

Some groups simply choose to let people volunteer to take the minutes at a meeting. This makes sense, however, in practice, over the many months and years that a study group may meet, it tends not to work. The trouble is, the volunteer can only record what they deem to be the most important ideas, and

can easily, and inadvertently, miss recording important ideas. In addition, and perhaps more important, the individual may want to play an active role in the dialogue, and may find the act of recording to be a burden. It has been observed by numerous study groups that sustained, minutes taking is not an easy task to pull off, despite being valuable for the group and its community.

Another solution is to use a device, such as a tape recorder, to capture the contents of a session. This too has problems, since many people would rather learn about important ideas that surfaced, rather than listening to a long, unedited, perhaps low-fidelity, recording.

A solution that seems to work consistently for groups is to distribute the process of capturing important ideas and then let a single volunteer compile the group's ideas into one document. The process usually works like this:

- *Communal Card Writing*
At the commencement of a study session, all participants are given small index cards, on which they are instructed to write 2-3 sentences, which they feel capture the most important ideas of the session.
- *Card Compiler*
At the commencement of a session, one person volunteers to play the role of card compiler. This individual will contribute a card with 2-3 sentences, and at the conclusion of the session, will gather up all of the cards, for later processing.
- *Diary Composition*
Within a day or two of the session, the card compiler will compose a diary containing all of the generated ideas from the group.

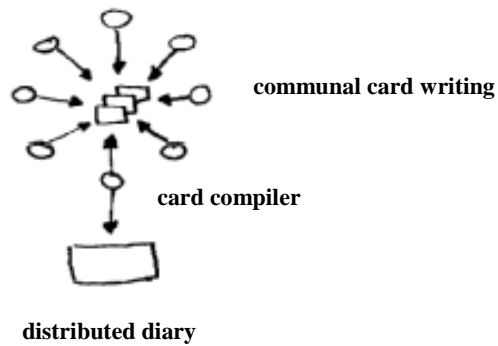
This solution works well, because the final output—a pool of the entire group's observations on what was important—tends to be a lot richer than the recording of a single individual's ideas about what was important.

If the group follows the custom of asking an OPENING QUESTION (15), it is a good idea to record this question in the final diary. For the edification of a study group, and its community, diaries are placed on VIRTUAL SPACES (9).

There is only one point that a group must be on guard about. (Also, write about giving feedback to authors).

Therefore:

Let all participants capture what they think are the most important ideas, questions or commentary of a study group session. One person will compile the group's observations into a single diary, which may be distributed to all group members.



Important ideas or questions may come up after a session, perhaps during an AFTERHOURS (21) discussion. Keep a ready supply of index cards for recording ideas that may belong in a study session's diary.

21 Afterhours *



. . . this pattern helps complete what the study group itself is designed to do: foster learning and personal growth—KNOWLEDGE HYDRANT (1), KINDRED COLLABORATORS (5).



Sometimes people learn more after a group meets than when a group meets. After meetings, people continue lively dialogues, get to know each other, blow off steam, exchange ideas, and discover opportunities. Yet so many groups fail to include social time.

Since it began as a gathering of friends, the DPSG has always included a post-meeting "social time". We use this time to eat dinner and have drinks, to continue the evening's dialogue, to network with each other or to just laugh about life and work. On some occasions, members of the group who can't attend a meeting--because of work, family or other engagements--find time after a meeting to join the group during our social time.

This time spent afterhours is called, in *A Pattern Language*, "COMMUNAL EATING". The authors write that "without communal eating, no human group can hold together." They quote Thomas Merton, who summarized the idea as follows:

A feast is of such a nature that it draws people to itself, and makes them leave everything else in order to participate in its joys. To feast together is to bear witness to the joy one has at being with his friends. The mere act of eating together, quite apart from a banquet or some other festival occasion, is by its very nature a sign of friendship and of "communion." ([Alexander+1977], p. 697)

After a study group session concludes, it's a good idea to go somewhere else for the group's afterhours time, since people get tired of being in the same place. More people will come out afterhours if they can walk to the location, and if there are a variety of foods and drinks available. It also helps to find a

place that can accommodate groups that fluctuate in size, for it defeats the purpose if a group has to get split up.

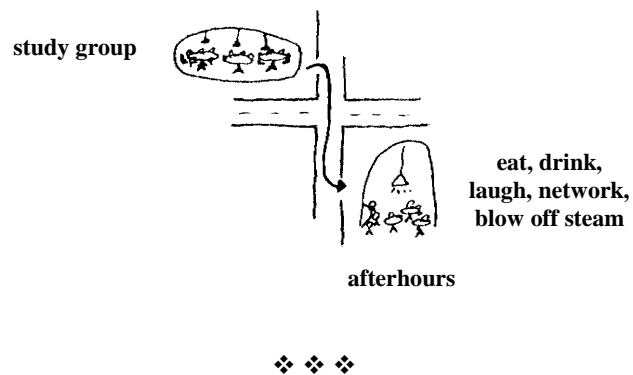


time for food, drink, talk and laughs

Afterhours time has always been very popular with the DPSG. But a few times, it also served a different purpose: once, a recruiter contacted every member of the group, hoping to be able to attend one of the meetings. We politely informed the recruiter that our meetings were not open to him, but that he would be welcome to join the group afterhours, at the group's favorite hang-out. We also mentioned that it might be nice if the recruiter purchased a round of drinks! After this meeting, a number of DPSGers reported that they had actually enjoyed the meeting, and pointed out how different it was to speak with a recruiter in a social context, rather than on the phone, in the middle of a business day.

Therefore:

Have unofficial meetings after official meetings. Go someplace fun, easy to get to or within walking distance, where members may eat and drink together, share experiences, network and enjoy each other's company.



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After a group has been going to the same place for a considerable amount of time, the group may want to spread out to other locations, preferably within walking distance. Some groups change restaurants twice a year.

Photo Acknowledgements

Most of the pictures in this pattern language come from friends. Special thanks go to Jean Leong and the DPSG for snapping some great shots of our favorite PUBLIC LIVING ROOM (7), Space Untitled.

1. St. John's College
2. Jean Leong
3. Jean Leong
5. (Space Untitled Shot)
7. Jean Leong
10. Kevin Prichard
11. Ward Cunningham
12. Jean Leong
14. St John's College
16. St John's College
21. Lenny Primak

Acknowledgements

First and foremost, I'd like to thank Christopher Alexander and his colleagues for writing *A Pattern Language*. If you don't own a copy, buy one. Trust me, it is an awesome piece of work.

I'd like to thank my wife Tracy for all of her help and for putting up with me during the writing of this work.

Many thanks to all of the participants in the writer's workshop at ChiliPLoP '99.

Thanks to (insert your name here).