

BUILDING FACULTY ENGAGEMENT AND A CULTURE OF INQUIRY THROUGH CLIPs— COMMUNITIES OF LEARNING, INQUIRY, AND PRACTICE



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Abstract

This paper describes a process for building the capacity of community college faculty to inquire into key issues about their teaching and learning. The CLIP process was developed and tested through a National Science Foundation at Bakersfield College in California. Communities of Learning, Inquiry and Practice (CLIPs) are self-selected groups of faculty and staff who collaboratively investigate questions about their work. They undertake a three-step evaluative inquiry process and operate under a set of guiding principles. The college provides a supporting and networking structure that gradually builds an evolving culture of inquiry across the college. The CLIP structure and processes complement the use of institutionally led strategic planning, goal setting, and assessment. Together they build a sustainable culture of inquiry and evidence-based decision-making. The testing of the CLIP process at a community college showed that the process (1) builds collaborative relationships; (2) enhances evaluative inquiry skills; and (3) leads to changes in professional practice among faculty and staff.

In addition to describing the CLIP process that resulted from this research and development initiative, this paper provides the theoretical basis for the CLIPs. The developers/researchers of the CLIP process integrated existing theories and conceptual frameworks about systems (especially complex adaptive systems); inquiry processes; learning; brain research; communities of practice; and planning and change processes.

Introduction

Over a three-year period, InSites and Bakersfield College developed a process for building the evaluation capacity of community college faculty through a National Science Foundation (NSF) grant. In this process, called Communities of Learning, Inquiry, and Practice (CLIPs), faculty learn to collaboratively gather and analyze data to address issues about teaching and learning that they identify as important. As we developed the process during the three-year grant, InSites also conducted research into the nature of the process and its effects.

During the following two years, we (InSites) kept in touch with Bakersfield College as it continued and supported the process with the college's own resources. We wanted to be sure that the CLIP process did indeed continue and also to see what else we could learn about why it seemed to work so well. During this time, we also created resources, in the form of online modules, to support the process at Bakersfield and other organizations that want to adapt the process to their settings. We have disseminated the process through carefully selected conferences and contacts and through the online modules that introduce the process and support its use in other settings.

This paper first describes the CLIP process and the supporting materials available online. The description incorporates findings from the evaluative research that accompanied the development process. We also discuss why several features of the original design did not play out as originally conceived in the Bakersfield College setting and how we adapted the design to fit not only the Bakersfield College context but the complex context of any college.

The second part of the paper looks at the process from a systems perspective to explain why it works and suggest how it can be continually renewed over time within a given setting. InSites drew on theories and research about systems (especially complex adaptive systems); inquiry processes; learning; brain research; communities of practice; and planning and change processes. Appendix E lists some of the key sources we used.

Bakersfield College

Bakersfield College is one of the oldest of the nation's 1200 community colleges. It is located in the San Joaquin Valley of southern California and serves a largely Hispanic population of 15,000 students. As in most community colleges, the faculty workforce spans a wide range of education and experiences, for example, professors with Ph.D. and master degrees in the sciences and humanities, experienced business leaders, and experience-based technical experts in agriculture, engineering, auto mechanics, computers and more. The CLIP learning experience described here has become the college's premier professional development experience for faculty.

InSites

InSites is a sixteen year old nonprofit organization (based in Colorado and Washington) with a team of professionals in social research, evaluation, planning, assessment, instructional design, interaction programming, communication, and graphic design specialties. InSites promotes learning, growth, and change through inquiry-based practices. InSites works with organizations and community groups in the fields of education, social services, and health.

What are Communities of Learning, Inquiry, and Practice (CLIPs)?

CLIPs—Communities of Learning, Inquiry, and Practice – are informal, dynamic groups of faculty and others whose members learn together about their professional practice by gathering and analyzing data about a topic of importance to them. CLIP team members learn an evaluative inquiry process with three steps: (1) design the inquiry; (2) collect data; and (3) make meaning and shape practice. Through participation in a CLIP, members simultaneously answer important questions and build their capacity to collaboratively address issues about teaching and learning on an ongoing basis.

CLIPs support, and are supported by, the broader organization's goals. CLIPs are highly adaptable. They can be used in education, social service, health, business, and community change initiatives. Modules about the CLIP process are free shareware through InSites available at www.insites.org/clip.

The development and testing of the CLIP process at Bakersfield resulted in a process with

both **in-person** and **online learning components**. The online components support the work of CLIPs at Bakersfield College and provide a means to link to other colleges. (The modules also are adaptable to other workplace settings.)

Results of CLIPs' Work

The summaries of the CLIPs' work at the end of each year show how the CLIP members generated information that is shaping their practice and is of use to their colleagues. (See newsletters from the CLIPs in 2005-06 and 2006-07 available at www.insites.org/clip.)

The program has developed a **momentum of its own**, with the number of participants growing each year and the college administration continuing to fund it. At Bakersfield, the program has resulted in twenty-four studies over four school years about instructional issues that are making a difference in classroom instruction, support services, and/or student learning as

evidenced by the data gathered by the InSites research team.

In-Person Learning

Each CLIP consists of three to seven people with one person as the group facilitator. An overall CLIP Guide supports the CLIP work at the college, builds carefully designed linkages among the CLIPs, and connects the whole process appropriately to the college's other processes and initiatives. The three types of in-person learning methods are:

- Members of individual CLIPs work together to gather and analyze data. They practice the development of inquiry skills and actually conduct a meaningful inquiry about their work.
- Multiple CLIPs meet together three times per year to share learning experiences.
- CLIPs learn through the information they gather from students and others.

Each CLIP determines its own schedule of meetings. Members receive a small stipend for participation and funds to carry out their planned inquiry.

Members develop questions that guide their inquiry. After gathering, analyzing, and interpreting data, they use their discoveries to shape their own instructional practices and student support services. Based on the results of their findings, they also produce a final product (written document, PowerPoint presentation, or other format) to share with colleagues.

All CLIPs meet together in multi-CLIP meetings three times during the year. At the first multi-CLIP meeting (August), the CLIPs learn how to conduct the inquiry process

and each CLIP refines its preliminary inquiry plan for the school year. By the second meeting (January), the CLIPs have gathered some data. They focus on making meaning from the data and completing their full inquiry by the end of the second semester. The third and final meeting (April) is a time for sharing preliminary results, receiving feedback, and celebrating the work together prior to completing their final products by July.

Online Learning

InSites designed the online modules to extend the learning by giving team members access to the resources used by any of the teams. Each module provides CLIP members with tools and methods at a more complex level as their learning develops. Putting the resources online allows for quick and frequent referral 24/7. Besides describing how to conduct a CLIP, the modules are replete with downloadable resources that give detailed examples and explanations of how to handle typical tasks.

Because every CLIP member has access to the same information at any time, the modules support the collegial nature of CLIPs where there is no one "expert" leader directing everyone else. Instead, the groups learn as they collaboratively accomplish their tasks.

The online modules (available at: www.insites.org/clip) have four delivery modes embedded within them: web pages, videos, popups, and downloadable resources for individual and group learning.

It takes about 20 minutes to preview a module. By previewing, we mean viewing all pages, videos, and popups in a module, but not downloading the supporting documents. After previewing a module, the amount of time needed to study it in depth depends on how many downloadable resources are studied and whether the PowerPoint slides are used as the basis for conversations at a CLIP meeting. All modules have one or more videos. Modules 3 – 5 have a series of video vignettes that follow the process of the STEM (Science, Technology, Engineering, and Mathematics) CLIP at Bakersfield College.

This is a brief description of each module:

Module 1: Overview of CLIP Process. This module introduces CLIPs and briefly describes how they operate.

Module 2: Introduction of Guiding Principles. The Guiding Principles are at the heart of the CLIP process. The principles address how CLIPs conduct their work (e.g., ask questions that matter; foster a safe, hospitable environment for inquiry). They were developed out of the experience of the CLIPs in the initial years of operation at Bakersfield College. To emphasize the importance of acting in accord with the principles, each online module ends with an opportunity for the team members to reflect on how their tasks addressed in the module reflect these principles. (The theory section below discusses the importance of guiding principles and how another college or organization might modify them for their context.)

Module 3: Developing an Inquiry Plan. This module helps members determine the purpose of their inquiry, position it among other inquiries and activities at their college, and decide on their main inquiry questions. As they do this, they also begin to develop a plan to collect, analyze, and report the inquiry data. The result is a preliminary inquiry plan. Downloadable documents support these activities.

Module 4: Gathering Data for the CLIP Inquiry. This module guides CLIP members in performing the major tasks in data collection: identifying sources of data; establishing a safe environment for data providers; choosing methods for data collection; setting up data collection; and ensuring that data collection is aligned with the guiding principles for CLIPs. Accompanying this module are downloadable tips on data collection, for example, tips on conducting interviews and focus groups and on developing and using questionnaires.

Module 5: Making Meaning and Shaping Practice. This module guides CLIP members in the interrelated activities of making meaning from the data: description, analysis, synthesis, and interpretation and applying what they learn to their professional practice. It helps members understand that these are not sequential steps, but intertwined

activities that inform and influence each other. The downloads include tips and exercises related to each of the activities.

Module 6: Being a CLIP Facilitator. This module contains tools to help the team member who serves as the CLIP facilitator. The downloadable resources include descriptions of roles of CLIP members, a CLIP Inquiry Plan template, and sample agendas and ground rules.

Module 7: Being a CLIP Guide. This module supports the CLIP Guide in positioning the CLIP process within the college and supporting CLIPs individually and collectively. The downloadable resources provide in-depth support for recruiting CLIP members and organizing the multi-CLIP meetings.

Research-Based Design

The research that surrounded the development of the CLIP process included gathering data from CLIP members through interviews, questionnaires, and focus groups. (See Appendix A.) The research also included review of products from the CLIPs, interviews with college administrators, and external review. While InSites and Bakersfield College gathered some of the data, an independent formative evaluation team from Research Evaluation Associates for Latinos (REAL) also gathered and analyzed data. Periodically, an external review panel reviewed the research and its use in building the CLIP process and the supporting online modules.

Our orientation to evaluation capacity building began with a shift away from external evaluation. The method we chose to develop shifted the evaluation from professional evaluators to those who operated programs. It involved building their capacity in a way that created checks and balances through collaborative involvements.

During the development process, we discovered yet an additional shift was necessary to be congruent with the reality of the complex environment of a community college (and most organizations today). That shift was in how the CLIP work was built into the

organization itself and how it connected to existing policies, practices, and reform initiatives.

Addressing Common Challenges in the Community College Situation

Several situations in community colleges make it very challenging for faculty to keep up-to-date in their instructional and support services. We designed the CLIP process to help with those challenges in the following ways:

- Most faculty have **no formal training** in how to design and modify their instructional practices based on feedback from students and other sources. CLIPs provide **expertise** in data gathering and analysis and create a **supportive environment** for change.
- Faculty tend to **work in isolation** on their own classes and seldom have opportunities to work with their colleagues on instructional issues. The CLIPs create **collaborative relationships** that have benefits beyond the immediate work.
- Faculty **teach many classes** every day with varying schedules making it difficult for faculty to find time to meet together. Each CLIP decides when to meet based on the varied **schedules** of its members.
- Community college faculty are **not allocated time** to research and study their instructional practices. CLIPs **spread successful instructional practices** to other faculty beyond those directly involved.
- Most professional development opportunities for faculty tend to be **one-shot workshops** on topics of interest. Although these have a certain level of value, they do not provide a means to ensure that learning moves into practice. CLIPs help team members readily move what they learn into their **instructional practice**.

As one team member said,

Our department initially got involved in the CLIP program because we were stalled in our development and assessment of department-level student-learning outcomes.... Although we were a bit apprehensive..., we were quickly sold on the

benefits of a non-threatening, collaborative, small-group environment when the CLIP sessions got underway.

Developing the CLIP Design at Bakersfield College

The original (proposed) design of CLIPs called for features that relied more heavily on formal structures or processes than what ended up playing out in practice. Differences between the original design and the design that emerged from the research and development effort included the following:

- The original design called for fairly extensive use of outside consultants/experts in areas related to evaluation technical skills and knowledge and workshop-style professional development sessions. Instead, CLIP members obtained the technical skills and knowledge more frequently through a **“just in time” informal model** rather than formal sessions.
- The original design called for the establishment of an institutional CLIP that would focus on adjusting the program review process. Instead, the changes in the program review process occurred through a more **informal process based on the leadership of a few CLIP members** who transferred their learning into another role they had within the college—being a part of the Institutional Effectiveness Committee which leads the program review process.
- The original design called for a Strategy Team that would look at identifying organizational policies and structures throughout the college that might need to be changed to support ongoing assessment and evaluation capacity building among faculty throughout the college. Instead, a **coordinating committee** oversaw the operation of the CLIPs and championed them within the college. It became apparent that a separate major initiative among policy and administrative leaders would be needed to actually bring about changes in organizational policies and structures.

One over-riding factor influenced each of the above differences—the extensive changes in top and mid-level administrative leadership and turf and personality issues between certain faculty and administrators regarding student assessment practices.

Although the details are different, many colleges and other organizations face issues related to leadership instability and personnel conflicts. The CLIPs provide a mechanism to move forward on the policy issues and conduct high-quality professional development within this unstable and conflicted environment. Ultimately, at Bakersfield College, each of these challenges proved to be a valuable learning experience because each provided a different insight into the CLIP process and its link to its context. Logic model figures in Appendix D provide further details about the differences between the starting design for the CLIPs and the one that actually emerged.

Benefits at Bakersfield College

As more and more CLIPs operate across the Bakersfield College campus—driven largely by the interest and enthusiasm of CLIP members—the process is changing the culture toward one of inquiry- and evidence-based decision-making.

The research conducted during the development process showed that the CLIPs produced measurable benefits to Bakersfield College and to the CLIP team members in three ways:

- efficiencies in time and money;
- learning benefits for CLIP members; and
- organizational benefits.

Efficiencies in Time and Money

Through three years of documenting changes resulting from CLIPs, we found that:

- **tasks** that faculty had not been able to complete are now being **accomplished**. For example, the math department reported that they had been working for several years to reach agreement on the core learning student outcomes in elementary and intermediate algebra. Through the CLIP process, they accomplished this task in one year for each of the levels of algebra.

- the **cost** of having a team gather and analyze data about an instructional issue is viewed by the college as a worthy investment. By summer 2008 (four school years), twenty-four studies were completed about important issues related to teaching and learning. Bakersfield is currently providing \$2500 per team for their stipends and other expenses. Costs for the multi-CLIP meetings, printing expenses, and other such costs are about \$1200 per year. The major benefit that the college sees is that the results of the studies done internally are being used by CLIP members to make changes in instructional practices and services to students as well as building a culture of inquiry across campus.
- money spent on **conference attendance and workshops** for CLIP team members is **more effective** because attendees now have a purpose in mind and can bring what they learned back to an intact group that can efficiently use the information to bring about change.

One CLIP member summed up the experience of many by saying,

“Through our CLIP group, we were able to design an important project, stay motivated and on task, divide the work load among several people, share ideas and insights, and enjoy working together in a positive environment.”

Learning Benefits for CLIP Members

The research team found that participation affected CLIP team members primarily in the following ways:

- Team members **enhanced the quality of their collegial relationships and relationships with students** including improving their communication practices with students and colleagues across disciplines and departments. For example, one CLIP member said:

“Strong and healthy relationships improve student learning, communication with students, and overall feelings of success.”

- Team members **increased their knowledge and skills related to inquiry practices** and evidence-based decision making regarding student learning and success. According to a CLIP member,
- "The CLIP process has helped us determine the heart of an issue so that we are investigating and seeking information that will truly help solve a problem."*
- Team members **diversified their strategies to influence student learning** as a result of what they learned through their particular inquiry. For example, the STEM CLIP members began providing information to their students about the positive relationship between participation in study groups and grades. They also are helping interested students form study groups and have taken action to get more locations on campus where study groups could comfortably meet.
 - The process has made CLIP members more **receptive to new and diverse ideas**. For example, one CLIP member said,

"At the beginning I was really determined almost not to change and thought I'm doing it the best way I can. This is really the only way that will do the job. [As a result of being in the CLIP], I realized that change is not always difficult and that improvements can result when you make a change. For me it worked perfectly."

Organizational Benefits

The college as a whole is also benefiting from the CLIP process. InSites' research showed that:

- **Results** from several inquiries are being **used** well beyond the departments and classes of those who were in the program. For example, the rubric (scoring guide) for assessing oral presentations in any subject area is now being used in departments across campus, not just in the oral communication department.

- The result of one CLIP inquiry is the **development of a new college program** (mass communications) that is expected to generate additional revenue for the college and build greater connections to the community.
- The institutional effectiveness committee at Bakersfield College is **building practices** generated through the CLIPs **into the program review process**.
- the experience is helping some faculty see that they could undertake the type of research that is necessary for a Ph.D. It is helping them **consider further education** which enhances the quality of the workforce.
- The positive experiences of being part of a CLIP is encouraging some CLIP members to become more **active in college leadership**.
- The data-based studies/inquiries conducted by the CLIPs is **shifting the culture** of the college toward greater inquiry- and evidence-based decision-making.
- The online modules are providing a **link to other colleges** who are interested in the work and building the visibility of Bakersfield College in the community college world. Over 2800 people have visited the modules online and over 225 people have downloaded the modules to their own site to date.

Linking Theory to Practice

“There is nothing more practical than a good theory.” – Kurt Lewin

The development of the CLIP process drew on multiple theories. In this section, we look at the link of theory to practice in regard to three questions:

1. Why do CLIPs work for participants?
2. Why does the CLIP structure and process work in and for the college?
3. Why is a CLIP-like structure essential for sustaining ongoing renewal of teaching and learning within a community college?

Why Do CLIPs Work for Participants?

When developing the CLIP structure and processes, we looked at research and theories including learning theory; brain research; communities of practice; inquiry; strategic planning; systems change; and large- and small-group processes. (See Reference list for some of the key documents we used.) Prior to developing the CLIP process, we had used these theories and their supporting research in a variety of settings. It was differences between these theories and what was actually being implemented in colleges related to student learning outcomes and assessment that led us to posit and then test various features of the CLIPs. The testing was done in an action research fashion with continual adjustments based on the extensive data we gathered from participants and leaders combined with what we were learning about theories and other research. This combination led to the features of the CLIPs. Through this process the following features emerged as more important than we had originally expected:

- the freedom of CLIP members—within certain parameters—to select their partners and topics, set their own schedules, determine their own budget, and engage in the inquiry process. This freedom was designed to ensure that the work was internally motivated and that the results would be useful and important to those involved. (See references about how people learn, brain research, group processes, appreciative inquiry, and communities of practice.)
- focus on the work of the CLIP members rather than on collection of information to shape someone else's work. Although the results of the CLIPs informed the work of many others, the inquiries were focused on the members' own work and what mattered to them.
- the simultaneous focus on collaboration and inquiry.
- the flexible link to the overall college goals and priorities related to student learning outcomes, assessment, and student success and other strategic initiatives such as a focus on the experiences of first year students.
- the use of guiding principles rather than specific steps and procedures.

Each of these features was congruent with bodies of research that built on a more **organic and nonlinear theory of systems** (i.e., one that recognizes the complexity of the education enterprise). We realize that there are groups—especially external groups—arguing for increasingly prescriptive approaches to teaching, learning, and assessment. We concluded that approaches that call for an alignment of outcomes, teaching and assessment have a far better chance of contributing to student success if they are complemented by the CLIP structures and processes that draw on the internal motivation, commitment, and values of the participants.

For example, we originally expected to bring in a number of outside consultants to provide workshops on topics related to student learning outcomes, student assessment, curriculum and instruction design, and evaluation of programs. Instead we learned that a project-based learning mode—where each CLIP’s inquiry drove what they needed to learn—was in keeping with the complexity of the college environment.

Most of the development of these skills and knowledge occurred through just-in-time assistance to the CLIPs when they were in need of the skills/knowledge. The knowledge/skills were provided through the CLIP Guide, written materials, websites, and other CLIP members who had the expertise. Over time, the college offered workshops in some of these areas but given scheduling issues and the emerging connections among CLIP participants, the other means were especially important. The CLIP collegial relationships encouraged the informal flow of knowledge/skills. (Some people did pursue more in-depth knowledge on the topics, for example, those working on a doctoral degree or those needing greater knowledge/understanding to fulfill responsibilities on an institutional committee.

The experience showed the importance of using theories that attend to the context and recognize the features of these dynamics that were important to address. (See discussion below on organized, unorganized, and self-organizing dynamics.)

Why Do CLIPs Work for the College?

While gathering data to determine if the design was working for participants, we were also studying if and how the design was working for the college as an institution. We were working with a wealth of research on systems change theory and practice and building on extensive research and experience with this topic. Yet it wasn't until mid-way through the three-year study that we found what proved to be the most helpful theory base to explain why the CLIP design works for both the participants and the college. At that time, we learned about complex adaptive systems theory. This theory complemented the more limited theories of systems change that we had been using.

Additional College Level Features

Before looking at the theory, here is more information about what happened at the college level including information on some features we had in the preliminary design for the process when we started the action research.

Link to Student Learning Outcomes and Assessment

The CLIP process was developed to complement planned approaches to change that involve establishing goals/outcomes and strategic plans. An approach that is becoming increasingly common in community colleges is to establish student learning outcomes at the course, program, and institutional levels and assess student learning based on the established outcomes. Other planned approaches involve review of institution-level data to look for differences between measures of student success and what is desired. These analyses usually look at the student body as a whole as well as subgroups within the population, for example, by gender and ethnicity. Gaps are identified and searches are done to find research about instructional and student services practices that may help to address the gaps.

Generally speaking, these approaches assume that one establishes a goal and then develops a specific strategy to achieve that goal. There is an assumption of a predictable relationship between use of the instructional and/or service approach and specific

outcomes. The assumption is that if the expected results were not achieved, the approach was not implemented properly and, therefore, greater adherence to the method is needed.

Another common approach is to develop institutional-level student learning outcomes and then ask faculty to ensure that they teach to these outcomes. Frequently, there is little guidance, resources, or support for faculty to determine how to adjust their instruction, courses, and programs to address the outcomes. Typically, the faculty lacks a culture of collaboration for making changes. Also, structures such as class schedules do not give faculty time for working collaboratively.

The CLIP structure was set up to generate a flexible process that would encourage creative ideas and explorations as well as collegial support. The overall CLIP structure and the inquiry process is a weaving of a flexible, creative approach along side a more planned, controlled structure or process.

Institutional CLIP

In the original design, we planned to form an Institutional CLIP that would develop an understanding of how systems change occurs. This Institutional CLIP would have studied the alignment of program review practices with the new processes that were being developed. This approach did not work for several reasons. Firstly, some of the people who were key to establishing such a CLIP did not have a broad enough basic understanding of alternative systems concepts to build support for this focus. Secondly, there were internal politics, turf issues, and personality issues that affected the ability of people to come together around this topic. Thirdly, the turnover in administrators compounded this lack of focus. Fourthly, after about a year and a half, a faculty member who was key in the initial establishment of the CLIPs at the college became the co-chair of the Institutional Effectiveness Committee. In this role, she was able to informally bring in changes with sensitivity to the complex politics of the situation.

In the end, many of the changes that we expected in the program review practices and policies did happen. Thus, the immediate need was addressed. The college, however, did not develop a broad institutional understanding about key systems concepts that could be transferred to other situations.

Strategy Team

The intended purpose of the strategy team in the original design was to review existing policies and practices on a college-wide basis and to look at how they supported or hindered the establishment of the CLIPs and the actions the CLIPs hoped to take based on their inquiries. We intended the strategy team to identify changes to be made in these policies and practices, but not to attempt to bring about the changes. Due to the administrative changes and turf issues, such a team was not formed. Instead, a coordinating committee was formed that focused specifically on the work of the CLIPs and how to ensure that the CLIPs functioned well and were supported. Rather than looking at the full range of policies and practices and their interconnections, the strategy became one of focusing on how the practices embodied in the guiding principles could be spread within the college.

For example, the guiding principle about ensuring a safe and trusting environment became widely valued at Bakersfield College. When the appreciative inquiry¹ approach to planning was pilot tested as a way to move toward addressing institutional policies and practices, it was eagerly embraced, in part, we think because it fit so well as the orientation that was needed. The basic concepts of appreciative inquiry were embedded in the revised program review processes.

With these examples on the table, let's now turn to issues of systems theory that underpin the CLIP design and how it played out at Bakersfield College. The systems theories presented here derive from research in the physical and biological sciences.

Systems Theories

When we started the research and development of CLIPs, we talked about taking a systems approach (the controlled, planned approach) and then weaving a more flexible structure around it. We built on systems as hierarchical structures primarily and then talked about networks, teams, and partnerships as complementary flexible structures. Yet the conceptual frameworks we were using as the basis for these flexible structures did not

¹ Appreciative Inquiry is a planning approach to positive change that builds on the best in people, their organizations, and the world around them. See reference list in Appendix E for more information.

seem to have a coherent theory behind them. In comparison, the controlled, planned, aligned model based on a fairly orderly view of systems had a more comprehensible foundation.

When we discovered the research on theories about complex adaptive systems that comes out of the physical and biological sciences, however, the fundamental nature of these social patterns and structures began to make more sense. The scientifically based theories about systems also gave us new insights and language to consider non-hierarchical structures.

Several theoretical pathways form the basis for systems theories—general systems theory, cybernetic systems, systems dynamics, and complexity science. The core idea of the systems field is to be holistic. Even if the whole cannot be studied completely, the idea is to keep the whole in our peripheral vision as we investigate parts and the relationships among the parts. Additionally, we found that the notions of being holistic and considering relationships as well as the parts was not sufficient to understand the dynamics of the CLIP process and its relationship to the formal structures and processes of the college.

General systems theory, cybernetics, and systems dynamics have a common theme in that they assume that systems move toward order and stability. Complexity science, on the other hand, talks about self-organizing that does not necessarily move to stability and order. It became increasingly clear as we developed the CLIP process that which of the orientations we assume, consciously or unconsciously, has a major impact on how we expect to bring about change in complex settings. To explain this, let's look at these theories more closely.

General Systems Theory, Cybernetics, and System Dynamics

Let's look first at the systems theories that build on the notion of order and stability. These theories emerged from the physical sciences and engineering fields in the early and mid-20th century, although they have roots in earlier times.

General systems theory posits that a system, which is made up of organized elements with certain relationships, tends to move toward order and stability. This is accomplished

by the system being open to its environment and continually making exchanges with it. For example, the human body is an open system. Its organs are arranged in a particular way and they continually interact with their environment (breathing, taking in nourishment) to remain alive. General systems theory leads to the practice of looking at a system as a whole, at its parts, and at how the parts relate to one another to maintain the order and stability of the system.

Cybernetics focuses on the need for, and nature of, feedback within a system. The system is seen as goal-directed. It is through feedback that adjustments are made to keep the system in balance within a changing environment much like the thermostat of a central heating system. In a cybernetic-inspired inquiry, you would assess the feedback loops and their influence on the system behavior and behavior of the parts. (Such a theory appears to be the basis for identifying goals/outcomes and assessing progress toward them.)

Systems dynamics originated as a way to model changes in systems mathematically using linear and nonlinear relationships. The basic idea behind using cybernetics and systems dynamics modeling in the social sciences is to use mathematical tools to determine how to control a system to maintain order and stability.

The application of general systems theory, cybernetics, and systems dynamics to organizations was popularized by Peter Senge (Senge, 1990). He shows how system dynamics can be depicted as archetypal behavior patterns (rather than using mathematical formulas) and how such information can be used to find leverage points to control the system to achieve order and stability.

These theories were quite congruent with the approach of identifying goals/outcomes and assessing progress toward them. They also were congruent with using hierarchical organizational structures to create order and stability. We will refer to these as organized system dynamics. However, they were not sufficient to explain the CLIP process. Another area of theory—complex adaptive systems—was the key.

Complex Adaptive Systems

Within the broad field of complexity science, theories about complex adaptive systems (CAS) introduce an important and fundamentally different notion than the orientation toward order and stability. It challenges the notion of control.

Here is the core idea: *In complex adaptive systems, many semi-independent and diverse agents, who are free to act in unpredictable ways, continually interact with each other. They are adapting to each other and the environment as a whole.* They can create influential system-wide patterns. They are not moving toward stability and are not controllable as posited by the earlier theories discussed above. This system is referred to as self-organizing. It is far from the equilibrium of either an organized state or the disintegration of an unorganized state. It is continually in a state of disequilibrium or intermittent equilibrium.

The application of CAS theories to human systems is still in its early stages and researchers, practitioners, and theorists are taking a variety of orientations to the work. They range from computer simulation modeling to observations of human systems with a CAS perspective in mind. A human self-organizing state is characterized by the coexistence of interdependence, independence, and feedback. Contentions, cooperation, and competition operate simultaneously. These system dynamics are shaped by guiding principles about behaviors (sometimes referred to as simple rules) that also take into account human consciousness and choices. Due to the continual adaptation of agents to one another, these self-organizing systems also have the potential to unexpectedly move to a radically new order that emerges without preplanning.

In self-organizing situations, we are not necessarily seeking to resolve/control tensions, but to make meaning of them and inform intentional actions regarding them. Rather than seeking to control the patterns and bring about stability as is done when using the cybernetic and system dynamics theories, one is seeking to influence the patterns in a participatory way. The use of guiding principles is particularly useful here. The agents in the system—be they leaders, members, or beneficiaries—take a significantly different stance under the two types of theories.

A Visual Representation

We find it useful to use a diagram to depict the different system dynamics. Figure 1² depicts the three different types of system dynamics that operate in complex systems such as education. It builds on the work of Brenda Zimmerman and colleagues (2001), Ralph Stacey (1996), and the work of Glenda Eoyang and her colleagues at the Human Systems Dynamics Institute (www.hsdinstitute.org).

The figure uses two factors—agreement and certainty—to give us a visual display of the relationship among the organized, self-organizing, and disorganized human system dynamics. “Agreement” refers to the degree of agreement among, for example, those in a group, team, organization, or community about the fundamental values on which the system is built and/or the activities in which it engages. “Certainty” refers to how predictably cause-and-effect relationships among actions, conditions, and consequences of actions can be identified.

Figure 1 shows how the degree of agreement and certainty relates to the three different dynamics within complex human systems. Certainty and agreement are factors that managers can consider about their situation to help them decide how to strategically work with the consequent human system dynamics as they contemplate their management strategy.

At one end of the spectrum, where the levels of certainty and agreement are high, we find stable, organized, predictable systems that can be modeled fairly well (e.g., a manufacturing process or accounting system). An organized dynamic also is the assumption underlying hierarchical structures within organizations. The structures are designed to bring stability, order, and a degree of control into the organization. For example, the notion of aligning course, program, and institutional learning outcomes and assessments builds on the use of an orderly, stable or stabilizing structure and process.

2 In Figure 1, the three dynamics are presented as distinct aspects of a system in a larger environment. It is important to recognize, however, that in a complex human system or collection of systems, the dynamics are highly intertwined, their boundaries are fuzzy, and the system is permeable and open to its environment.

At the other end of the spectrum in Figure 1, where systems exhibit both low certainty and low agreement, we find a random, unorganized situation. These are situations where we can't see any patterns, or where the elements of a broader system have not yet self-organized or been organized by someone or something. This dynamic is congruent with the notion of academic freedom and laissez faire approaches to management.

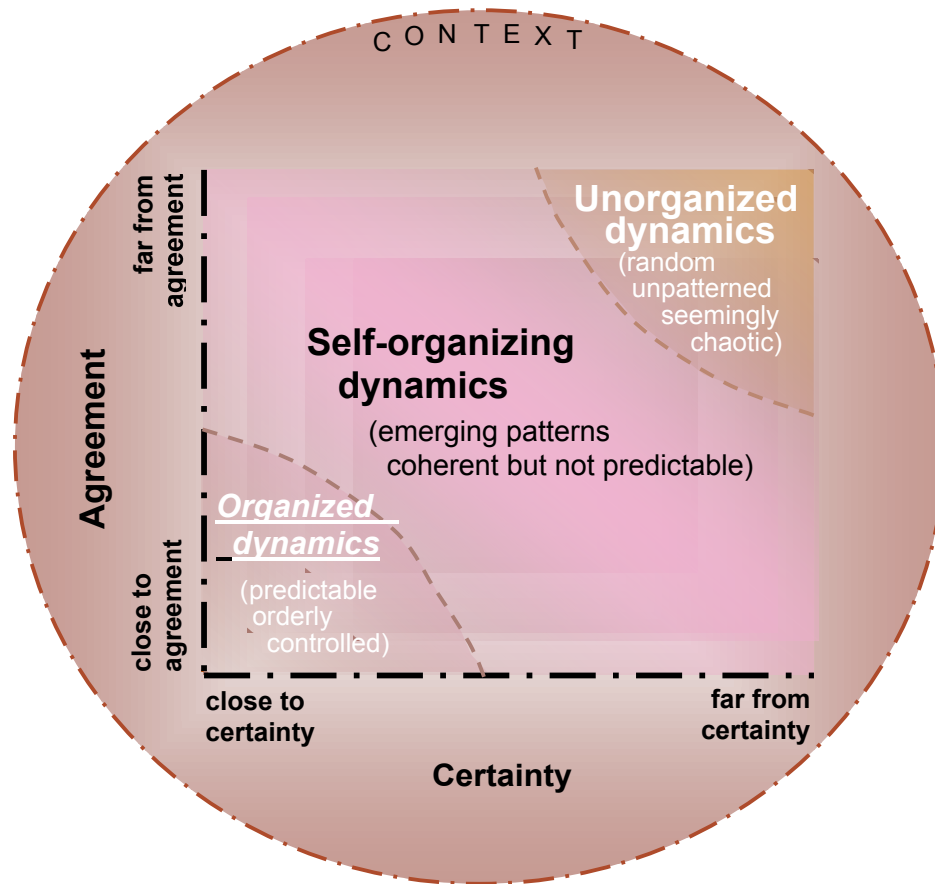


Figure 1. Three Dynamics of a Social System and its Context

Between these two ends of the spectrum (moderate certainty and agreement) is the special dynamic of a self-organizing system. When a system is self-organizing, small differences in factors sometimes create large consequences and, at other times, do not. This inhibits our ability to make accurate predictions; the possible variations are too complex and vast to be predicted. This is the type of dynamic that operates alongside and

intertwined with the organized and unorganized dynamics within an organization. Here is where we have the dynamic we talked about earlier that is characteristic of complex adaptive systems. Often unbeknownst to the “semi-independent and diverse agents”, they are creating influential dynamical³ system-wide patterns. This self-organizing dynamic represents the way interactions happen between faculty as they are rethinking their work and throughout the teaching and learning process as faculty and students interact. It is this type of dynamic that the CLIPs are designed to capitalize on by providing some simple structures, processes, and guiding principles of action that support and encourage faculty’s natural desires to promote student learning and success.

Application to CLIP Process

With this theoretical backdrop, let’s now look at how these three different system dynamics are reflected in the CLIP process and its relationship to the other dynamics of the college. Notice that the CLIP process is not solely reliant on the self-organizing dynamic. First, it links to the organization’s focus on specifying student learning outcomes and their measurement. Secondly, the inquiry process provides structure—design the inquiry, gather data, make meaning and shape practice.⁴

Because the nature of the self-organizing dynamic is often not recognized or nurtured, it is assumed that we either have organized or unorganized systems. Leaders feel they need to organize/control the organization or jump to the other extreme of stepping away from attempting to shape the organization (e.g., in colleges, when issues of academic freedom are raised, administrators often feel they must step back).

Failing to distinguish the self-organizing dynamics from the organized or unorganized dynamics can easily undermine how major changes are undertaken within a community college. The current emphasis on establishing and assessing institution-wide student learning outcomes serves as an example. For simplicity sake, let’s break the process into three parts—(1) establishing the student learning outcomes; (2) mapping

³ Dynamic means something is continually moving. Dynamical means something is continually changing its motion.

⁴ This process is essentially the scientific process. It also is congruent with research about how the brain works. (See Rule 12 in *Brain Rules* by J. Medina.)

courses and programs to the outcomes; and (3) establishing ways of assessing the outcomes.

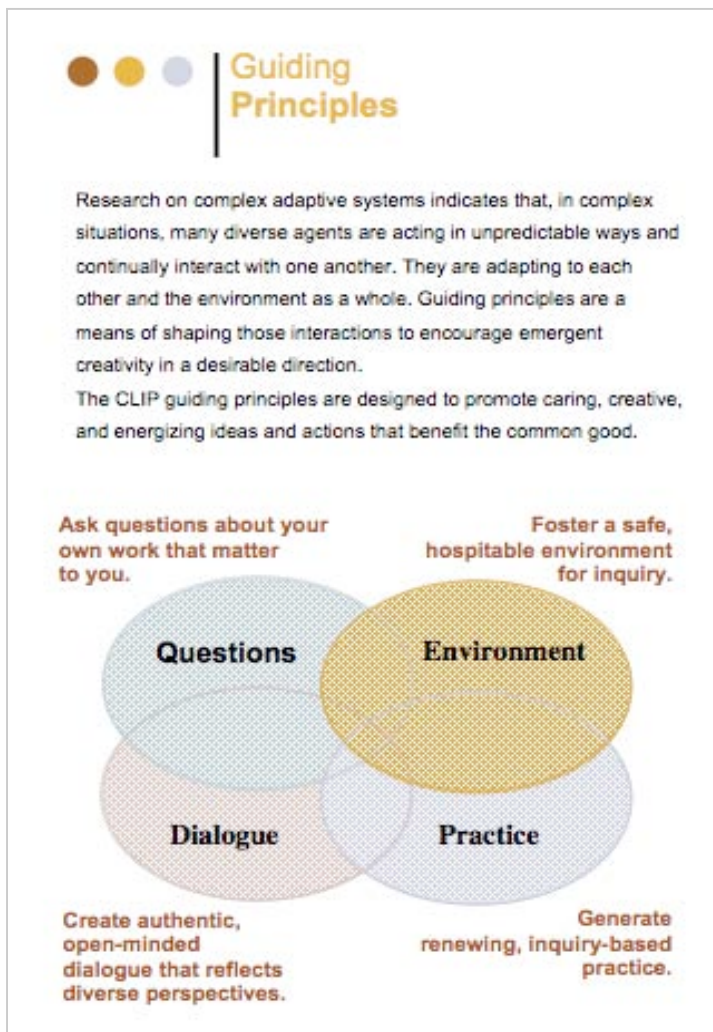
Each of these processes provides the opportunity for different blends of the use of organized, unorganized, and self-organizing dynamics. The self-organizing dynamic is one of the key dynamics to use at each of the stages. Yet, we often see rather erratic movement back and forth between processes congruent with the organized and the unorganized dynamics while limited attention is paid to processes that intentionally leverage the self-organizing dynamics. For example, the college may establish the student learning outcomes using processes designed to reach agreement on a few predictable student learning outcomes and assessments, but give faculty complete freedom in the curriculum as long as it can be rationally argued that it links to the shared outcomes with little supporting structures that encourage collaborative self-organizing. The breadth of the outcomes and the flexibility of the assessment practices strongly influence how well these strategies work.

By consciously leveraging processes that are designed around self-organizing dynamics, the college can produce work that is likely to be more successful and sustainable. The CLIP process was designed to work alongside institution-wide student learning outcomes and assessments or other strategic initiatives with specified outcomes. The CLIP process builds on the self-organizing dynamic to give the faculty the opportunity to work collaboratively. As we said earlier, self-organizing dynamics involve many semi-independent and diverse agents who are free to act in unpredictable ways and are continually interacting with each other as they adapt to each other and the environment as a whole.

In the CLIPs, faculty along with the students and others who are engaged in data collection have the choice of what questions to investigate and how to do so. Each CLIP is interacting intensively around designing their inquiry, gathering data, and making meaning from it to apply to their practice. The CLIPs are designed to encourage the self-organizing in a general direction that is congruent with the basic values of the participants and focused on the overall direction.

This method allows considerable room for defining the process of moving in the desired direction while allowing for emergent new and creative results rather than specifying outcomes in detail. For example, a CLIP identifies a focus for an inquiry that relates to student learning and success, while the inquiry process itself is designed to reveal new understandings rather than being designed to support a predetermined perspective.

To support a self-organizing dynamic, it is important to determine guiding principles that are congruent with the basic values of those involved and focused on the overall direction. The CLIPs at Bakersfield College had eight guiding principles; the essence of the principles is captured in four:

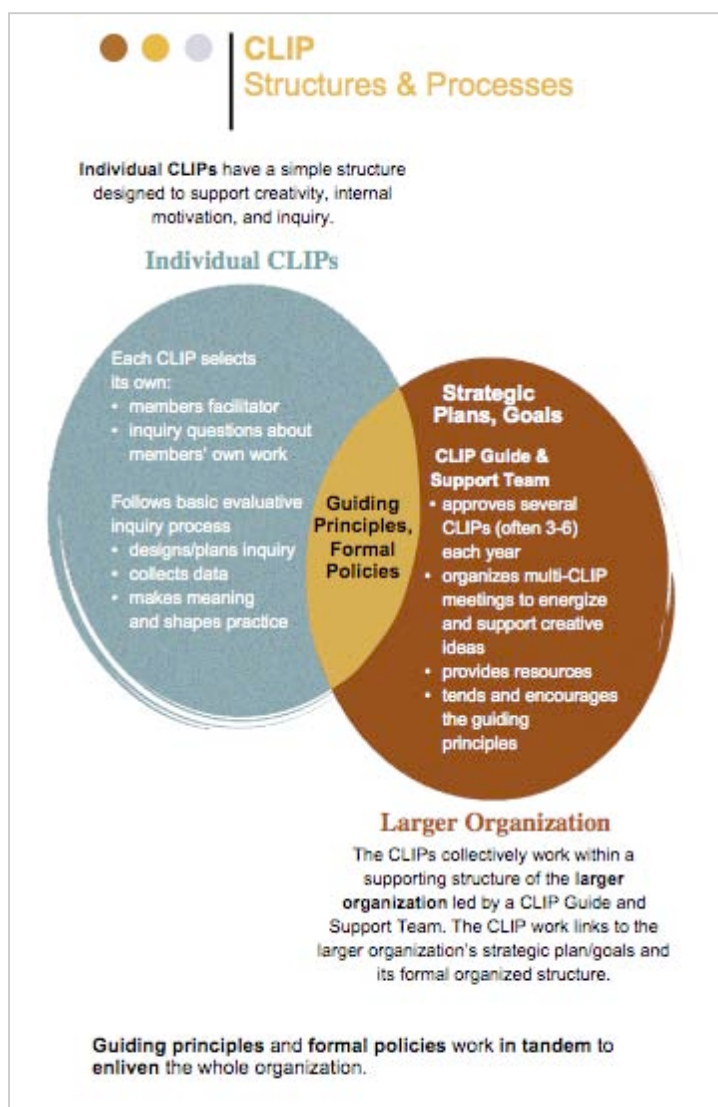


- Ask questions that matter.
- Foster a safe, hospitable environment for inquiry.
- Create authentic, open-minded dialogue that reflects diverse perspectives.
- Generate renewing, inquiry-based practice.

The CLIP guiding principles are designed to promote caring, creative, and energizing ideas and actions that benefit the common good. (More details about the principles are in the second online module.)

Why Are CLIP-Like Structures and Processes Essential for Sustaining Organizational Renewal?

Although the self-organizing dynamic is the dominant dynamic of the CLIP process, the design has aspects of the organized and unorganized dynamics. We found that the situation at Bakersfield College was dominated more by self-organizing and unorganized dynamics than the organizing dynamics we had initially assumed. By recognizing the different dynamics, we were able to adjust our approach to leverage the appropriate dynamic in the situation.

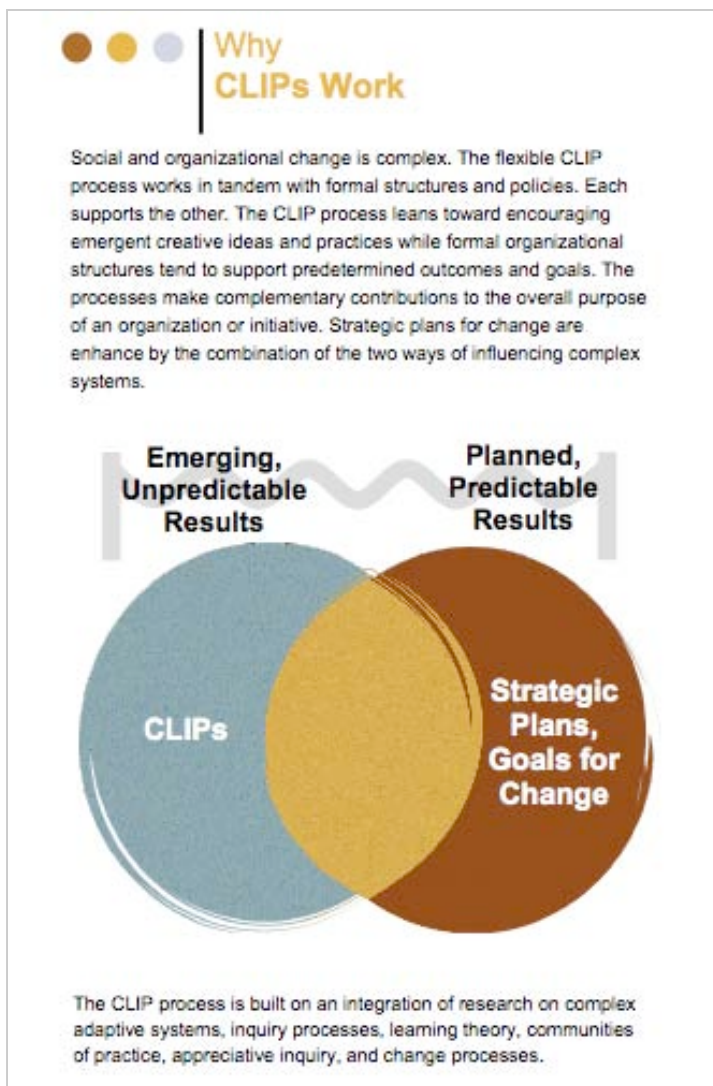


Similarly, although goal-focused strategic plans and processes such as establishing institutional student learning outcomes and assessments are based primarily on the organized dynamic, they benefit from using elements of the self-organizing and unorganized dynamics as well.

The overall key is to be conscious of these three different dynamics; understand their defining characteristics; develop a way to attend to the patterns over time and across locations (e.g., variations across departments, connections to the community); and consider how to intentionally use structures and processes that leverage each for the benefit of the organization's purpose.

Recall that earlier we said that one

feature of complex adaptive systems is that new structures are likely to emerge from them without preplanning. This emergence may happen of its own accord but it is also likely to happen when people within the system develop an understanding of patterns within the self-organizing dynamic and recognize ways of influencing those patterns. Those patterns can be influenced particularly by changes in guiding principles, new connections between self-organizing dynamics and organized dynamics, establishment of attractor patterns,⁵ and understanding how slight variations in initial conditions can lead to quite different results.



It is from the self-organizing dynamic that creative new ideas are likely to emerge that can be leveraged for systemic change. Thus, it is very important to support this dynamic as well as understand the patterns that are forming and shifting over time and across various locations within the college. By understanding the patterns, leaders and others within the system can both see opportunities for encouraging new ideas and for understanding them when the time is right to encourage new directions.

It takes time to develop a way to gather information to track patterns and understand how system dynamics are best influenced and under what conditions each is appropriate and effective. An ongoing strategy for

⁵ An attractor can be thought of as a circumscribed or constrained range in a system that seemingly underlines and attracts how a system functions under particular conditions.

renewal and success is called for. This strategy would combine (a) structures such as the establishment of student learning outcomes and assessments with curriculum mapping to support the outcomes; (b) sustained leadership and support from top administrators and faculty leaders; and (c) a CLIP-type of structures and processes to make the myriad adjustments in teaching and learning processes needed to be coherent with the outcomes.

Appendix A:

Research Focus and Example Findings

The research began with a hypothesized CLIP design which we based on our thinking at the time we wrote the proposal for funding about how to integrate research on learning theories; systems change; communities of practice; inquiry/evaluation processes; and student learning outcomes and assessment.

Initially, we designed the work using a logic model. (See logic model in Appendix D. Although we realized the CLIP process would be more dynamic than shown in the logic model, our initial design was heavily based on a concept of planned change.

Here are the features of the work that we originally expected to focus on and where we hoped to see changes when using our original design:

- a. **Quality of Project Core Work:** Do the evaluation capacity building activities for the faculty CLIP improve (a) faculty knowledge and application regarding student, course, and program assessment; (b) instructional methods; and (c) student outcomes? If so, what is the nature of the essential evaluation capacity building activities?
- b. **Program Review Process as Key Sustainability Component:** Do the evaluation capacity building activities for the Institutional CLIP improve the program review process and improved teaching and learning within the programs of the faculty involved in the CLIPs and possibly other programs?
- c. **Evaluation Capacity Building (ECB) Professional Development Modules:** Do the modules incorporate the best of the evaluation capacity building skills, knowledge, and attitudes used with the CLIPs in a way that successfully assists other faculty and administrators to build their evaluation capacity?
- d. **Other Sustainability Factors:** What other policies, practices, and conditions are critical to supporting the faculty's development of assessment and evaluation knowledge, skills, and applications? What are the key features of these support structures?
- e. **Evaluation Capacity Building Model:** Overall, what are the essential elements, activities, and processes of the evaluation capacity building CLIP model and how do they work together synergistically to deepen and sustain the evaluation capacity of a community college beyond the three years of the project?

Here are examples of responses of CLIP members to interview questions and questionnaires used throughout the development of the CLIP process.

- "I've learned that it is okay to disagree and that meetings are more productive when there are relationships and a common goal in place."
- "Rather than viewing my courses as a grocery list of chapters and tasks, I now look more for an overall focus and ways to interrelate each activity to student outcomes and understanding, continually reviewing and assessing student/class progress."
- It surprised me how much some students want to succeed in college. When many of our students do poorly, it is not always for the reason we thought."
- "I value the fact that we are doing something REAL, that will have definite outcomes, and that we will learn from."
- "CLIP participants seem so much more relaxed and ready to contribute ideas because everyone knows that each member wants to participate and be involved."
- "It surprised me how something complicated, like measuring student outcomes, can be brainstormed, measured, and analyzed in a relatively short period of time with so many faculty working together in the process."


Comment from a student in the class of a CLIP member:

- "I'm impressed that the faculty are doing this research. When we filled out the questionnaire in class it made us think more about studying and study groups."

Appendix B: CLIP Newsletter Showing Evidence of Results

Here are three pages selected from the 2005-06 CLIP newsletter prepared at the end of the year. The newsletter was distributed to all faculty at the opening day events in the fall of the subsequent school year.

Fall 2006



Bakersfield College

WHAT ARE CLIPs?

Communities of Learning, Inquiry, and Practice (CLIPs) are informal and dynamic action research groups (largely faculty) who tackle questions about teaching and learning that participants want to investigate. CLIP members make inquiries into their chosen questions through a five-step "evaluative inquiry" process: (1) position the inquiry; (2) plan the inquiry; (3) collect data; (4) analyze and synthesize data; and (5) communicate/use the findings from the inquiry.

CLIP members build their skills and knowledge in conducting such inquiries while learning to work together to address sensitive issues and try out new approaches to teaching and learning. Faculty are the primary constituents of CLIPs, but administrators, staff, students, and community members also participate.

The work of the six CLIPs in operation during the 2005-06 school year is reported here. Quotes are from CLIP members.


Assessing Students' Oral Communication Skills

Communication CLIP Members:
Helen Acosta, Michele Bresso, A. Todd Jones, Michael Koreok, Mark Staller (facilitator)

Each CLIP prepares a final description of their work directed toward a particular audience. The Communication CLIP wrote their summary to their Bakersfield College colleagues. Here are excerpts from what they wrote:

In the 2005-06 academic year, five members of the Bakersfield College Communication department participated in a CLIP. We would like to share our experience as a CLIP with the entire Bakersfield College campus community because we feel that other staff and faculty may benefit from the work products of a CLIP group, or even through participating in a CLIP themselves.

Our department initially got involved in the CLIP program because we were stalled in our development and assessment of department-level student-learning outcomes. When we realized that involvement in the CLIP grant project would provide us time to work together and financial




Spring 2006 cross-CLIP meeting

"I wanted to work with my colleagues to accomplish a big task that had been on the back burner for a while. The funding allowed us to make the task a top priority."

resources to carry out some crucial research, we jumped at the chance to participate. Although we were a bit apprehensive about hammering out sensitive details concerning student-learning outcomes in a small-group setting, we were quickly sold on the benefits of a non-threatening, collaborative, small-group environment when the CLIP sessions got underway.

Communities of Learning, Inquiry, and Practice
Bakersfield College • August 2006 1



Although we gained a lot of knowledge about the assessment of oral communication skills through our CLIP work, we also gained important knowledge about collaborating in a work group. Through our CLIP group, we were able to design an important project, stay motivated and on task, divide the work load among several people, share ideas and insights, and enjoy working together in a positive environment. We highly recommend your participation in a "community of learning" if the opportunity arises!

Improving Students' Success Rates through Letter Writing and Conferencing

Developmental Writing CLIP Members:

Brenda Preaney, Hillary Neumeister, Paula Parks (facilitator)

"Our project gave students the opportunity to reach out on a personal level to us as instructors and feel that they were real people to us, not just a name on a roll sheet," said one CLIP member in describing the Developmental Writing CLIP.

This CLIP studied the progress of students who had passed Academic Development (ACDV) 68 and were enrolled in English 60. As one CLIP member described it, "[In the past], it was assumed that these students would do well in English 60 [essay writing] because of their successful background in ACDV 68 [paragraph writing]. This, surprisingly, was not the case. Our goal was to find out why and to see if we could come up with strategies to help these at-risk students."

The CLIP decided to see if students in English 60 would perform better if they received personal attention from their composition instructor. The CLIP's study required students in eleven English 60 classes to submit letters to their instructor on assigned topics and to participate in conferences with the instructor. The topics were about issues of importance to the students.



Members of the Developmental Writing CLIP at January meeting

After implementing the letter writing and conferencing, they compared retention rates and pass rates in these classes with those in the other English 60 day classes. They found that former ACDV students in the classes that required letter writing and conferencing had high retention rates and equal pass rates compared with other English 60 classes. Also, according to a CLIP member, "It was clear that the majority of students wanted, benefited, and even enjoyed more frequent personal attention and interaction with their instructor."

This CLIP is preparing an article based on their work for submission to a journal in their field. They are working with Lisa Fitzgerald in the Bakersfield College Institutional Research office to analyze data from the Spring semester to see if the findings from the Fall are replicated.

Knowing that these data are preliminary, a CLIP member said, "I am eager to continue our project over several years so we will have enough data to make a comparison to past semesters."

"I had an ideal CLIP! I think our CLIP benefited from being in two different but related departments and we had a "swing" member who knew how both areas functioned."

Please contact the Math Department about the agreed-on content of the Developmental Mathematics courses. Knowing the core topics for a course can be helpful if it is a prerequisite for a course you teach.

Facilitating Peer Study Groups to Improve Student Performance in Science, Technology, Engineering, and Math (STEM) Courses

STEM CLIP Members:

Wayne Cooper, Consuelo Gonzalez (facilitator), David Guerrero, Rebecca Head, Liz Rozell, Joe Saldivar, Patrick Serpa

"I suppose, unknown to me, I have been doing evaluative inquiry most of my educational life," said one participant. "I continually evaluate what I am doing and try to improve whatever method(s) at hand. Being involved with the CLIP has provided an opportunity to work with others of similar interests."

The seven participants in this CLIP included five faculty, a staff member, and a student. They came together to better understand the peer study needs of MESA (Mathematics, Engineering, and Science Achievement) students, to provide an environment to support these needs, and determine ways to disseminate information about study groups to MESA students. As the CLIP work evolved, they broadened

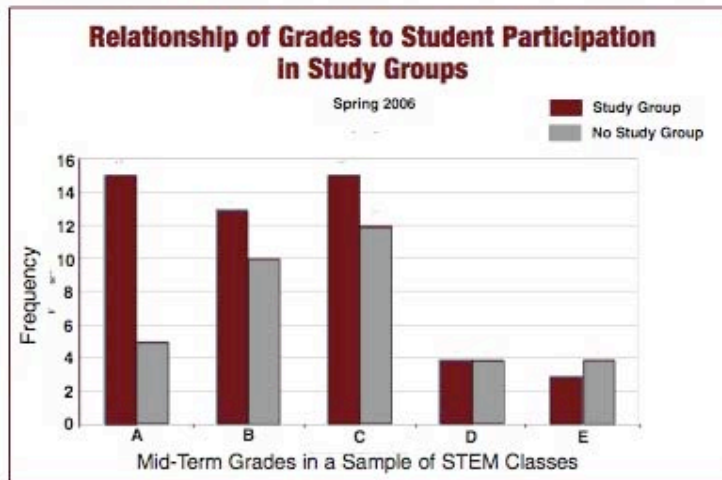
"One year was an insufficient time frame to make a definite conclusion."

their focus from MESA students in Science, Technology, Engineering, and Mathematics (STEM) to all students in STEM courses.

One member of the STEM CLIP had participated in the previous year's Physics CLIP, which considered whether participation in the discussion sessions held by instructors correlated with test scores and homework completion rates. After collecting and analyzing the data, the members of that CLIP learned that some students who were coming to the discussion sessions took the information from the session to their friends in informal study groups. In this way, the discussion sessions were actually having more of an impact than the faculty had expected.


The STEM CLIP decided to investigate how effective study groups might be encouraged among more students.

To determine how prevalent peer study groups are among students, the CLIP administered a survey to students in STEM and non-STEM classes at the end of the Fall semester. Among other ques-




Appendix C: Examples of Features of Online Modules

The right margin of each web page is designed with an “icon alley.” Three different icons are used to denote different types of information that appear as pop-ups—quotes from CLIP members, more examples of the topic on the page, extra information from research and other sources, and more information on the case study (the STEM CLIP about study groups) that is used throughout the modules.




1: What are CLIPs?

[Welcome](#)
[What is a CLIP?](#)
[Purpose of a CLIP?](#)
[Benefits to CLIP Members?](#)
[Benefits to Students?](#)
[Benefits to the College?](#)
[How Do CLIPs Work?](#)
[What is Yearly CLIP Schedule?](#)
[Phases of CLIP Inquiry?](#)
[Principles Guiding CLIPs?](#)
[How Do You Get Involved?](#)
[Summing Up/Moving Ahead](#)
[Downloads](#)
[Home](#)





What are the Benefits to CLIP Members?

The benefits to CLIP members are many. Participating in a CLIP provides opportunity for collegial work and expands members' thinking about teaching and learning issues. Being in a CLIP also provides an opportunity to conduct research/inquiry about teaching and learning.




Because CLIPs build members' skills and knowledge in how to conduct inquiries, they allow members to analyze and reflect on beliefs, strategies, and the consequences of their actions in a safe, trusting environment. CLIPs elicit the strengths of those involved, as well as provide a vehicle to engage in collaborative inquiry-based decision-making.



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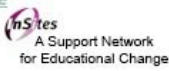
Example of Videos Within Modules

The modules contain eleven video segments of 30-120 seconds each. All video segments are closed-captioned. Here is an example of a page from which a video is accessed.



3. Designing the CLIP Inquiry

- [Welcome](#)
- [Determining Purpose](#)
- [Discussing Key Questions](#)
- [Developing a Concept Map](#)
- [Positioning the Inquiry](#)
- Deciding on Inquiry Questions**
- [Data Collection Ideas](#)
- [Analysis/Communication Ideas](#)
- [Developing a Plan](#)
- [Reflecting on Decisions](#)
- [Summing Up/Moving Ahead](#)
- [Downloads](#)
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Deciding on Your Inquiry Questions – Going Deeper


To gain a better idea of how inquiry questions are developed, listen to a member of the STEM (Science, Technology, Engineering and Math) CLIP at Bakersfield College tell how they decided on their inquiry questions.


This CLIP wanted to find out whether peer study groups improved student learning. They had a special interest in the students in the Mathematics, Engineering, Science Achievement (MESA) project. The process of deciding on their questions helped this CLIP discover how best to focus their inquiry.


While choosing their inquiry questions, they thought about:

- study needs of STEM and MESA students
- how to provide an environment to support those needs
- student achievement with and without study groups
- how to measure success

Reflect on what made them realize their questions needed to be different and why they ended up with the specific ones they chose.




Press  above to watch video. When done, click arrow to go to next page.




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Examples of Pictures Within Modules

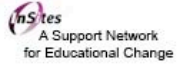
Pictures taken at CLIP meetings and other locations are used throughout the modules.





3. Designing the CLIP Inquiry

- [Welcome](#)
- [Determining Purpose](#)
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- [Developing a Plan](#)
- [Reflecting on Decisions](#)
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Analysis and Communication Ideas


Next, generate ideas about:

- [methods for making meaning from the data \(analysis\)](#)
- [recipients of the results of your inquiry](#)
- [how you will communicate results](#)

Module 5 describes the steps of making meaning of the data and using the results to shape professional practice; however, think through these ideas at a general level now so your CLIP has a good idea of where its inquiry is going and why.



Click on the underlined text to see more ideas about analysis and communication.



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Example of Graphic Figures Within Modules

Graphic designs are used to add an informal and friendly feel to the modules in selected places.





2. Eight Guiding Principles for CLIPs


Welcome

1. Conduct inquiry
2. Ask questions
3. Create a safe environment
4. Encourage contribution
5. Build relationships
6. Create dialogue
7. Engage in reflection
8. Generate practice


Summing Up/Moving Ahead

Downloads



Home



**CLIP Guiding Principle 2:
Ask questions that matter**

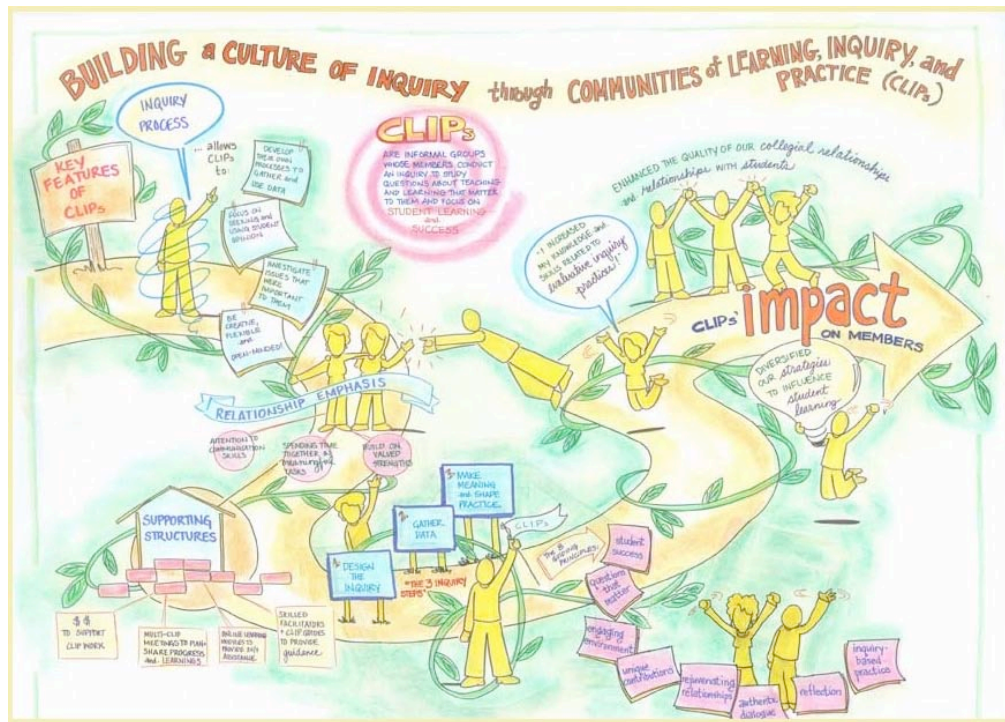


Ask questions about issues related to student learning and success that you, students, and others truly care about. Use questions throughout the inquiry that lead to deep levels of understanding about valued and meaningful issues.

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Example of Downloadable Documents

CLIP Inquiry Plan Template

Gathering Data and Making Meaning from Data

Inquiry Question	Information Needed to Answer Inquiry Question	Data Sources	Data Collection Methods	Data Collectors	Timing and Location of Data Collection	Plan for Meaning Making from Data

Sharing CLIP Discoveries

Who do these discoveries matter to?	Who can take action on these discoveries?	What will we share?	How/Where will we share?	When will we share?



Tips for Analyzing Qualitative Data

Analyzing qualitative data involves reading through the interview or focus group transcripts and other data, developing your codes, coding the data, and drawing connections between discrete pieces of data.

Reviewing your data

Begin data analysis as soon as possible after you begin data collection. Read the data with an eye for themes, categories, patterns, and relationships. Write analytic memos [example?] and/or hold analytic meetings with other CLIP members to capture your initial thinking and tentative ideas about the data. These preliminary reviews may reveal areas that are being overlooked in the interviews and prompt you to allow time to address these in future interviews. The initial themes and categories that you see in the data also inform the codes that you will use for a systematic analysis of your data.

Organizing your data for analysis

The most common forms of qualitative data that CLIPs collect are transcripts from individual and group interviews (including focus groups) and responses to open ended questions from questionnaires.

How you organize your data for analysis depends on whether the data are grouped question-by-question and are woven throughout an interview.

If you cannot easily separate the data question-by-question, you will need to analyze the whole interview for common themes, categories, and patterns. See the section below on developing your codes, coding your data, finding themes, patterns, and relationships, and summarizing your data.

Instruct the person who is transcribing the tapes to indicate along the left side of the transcript who is speaking, i.e., the respondent or interviewer. This is relatively easy to do for individual interviews but may be difficult for a focus group. Detailed notes of the focus group that include the speakers' names or initials will help you to correct the transcript as needed. Leave a wide right margin for coding the transcript and adding comments as you analyze the data.

When you have qualitative questionnaire responses as well as responses to very structured interviews, you can organize responses question-by-question. This makes it easier to analyze the data. The following is one approach to organizing the data in a word processing program.

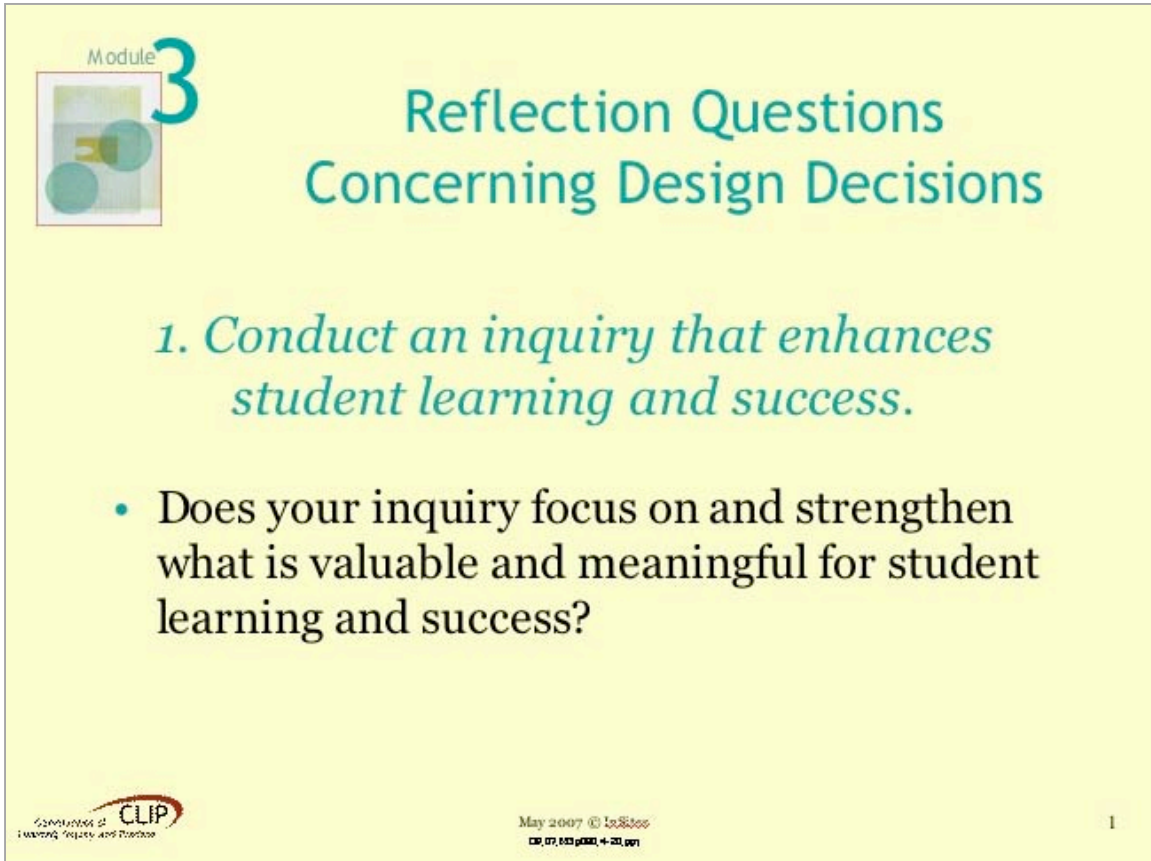
Example - Questionnaire data¹

Analysis of qualitative data can be facilitated by organizing the data in tables that can be sorted by respondent, question, and other characteristics. Begin by creating a three- column table.

¹Although this process can be used for structured interviews, in this example we only refer to questionnaire data.

Example of PowerPoint Slides for Team Discussion

Some downloadable files are in a PowerPoint format to facilitate discussion at CLIP meetings.

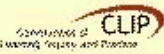


Module **3**

Reflection Questions Concerning Design Decisions

- 1. Conduct an inquiry that enhances student learning and success.*

- Does your inquiry focus on and strengthen what is valuable and meaningful for student learning and success?

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Appendix D: Logic Models

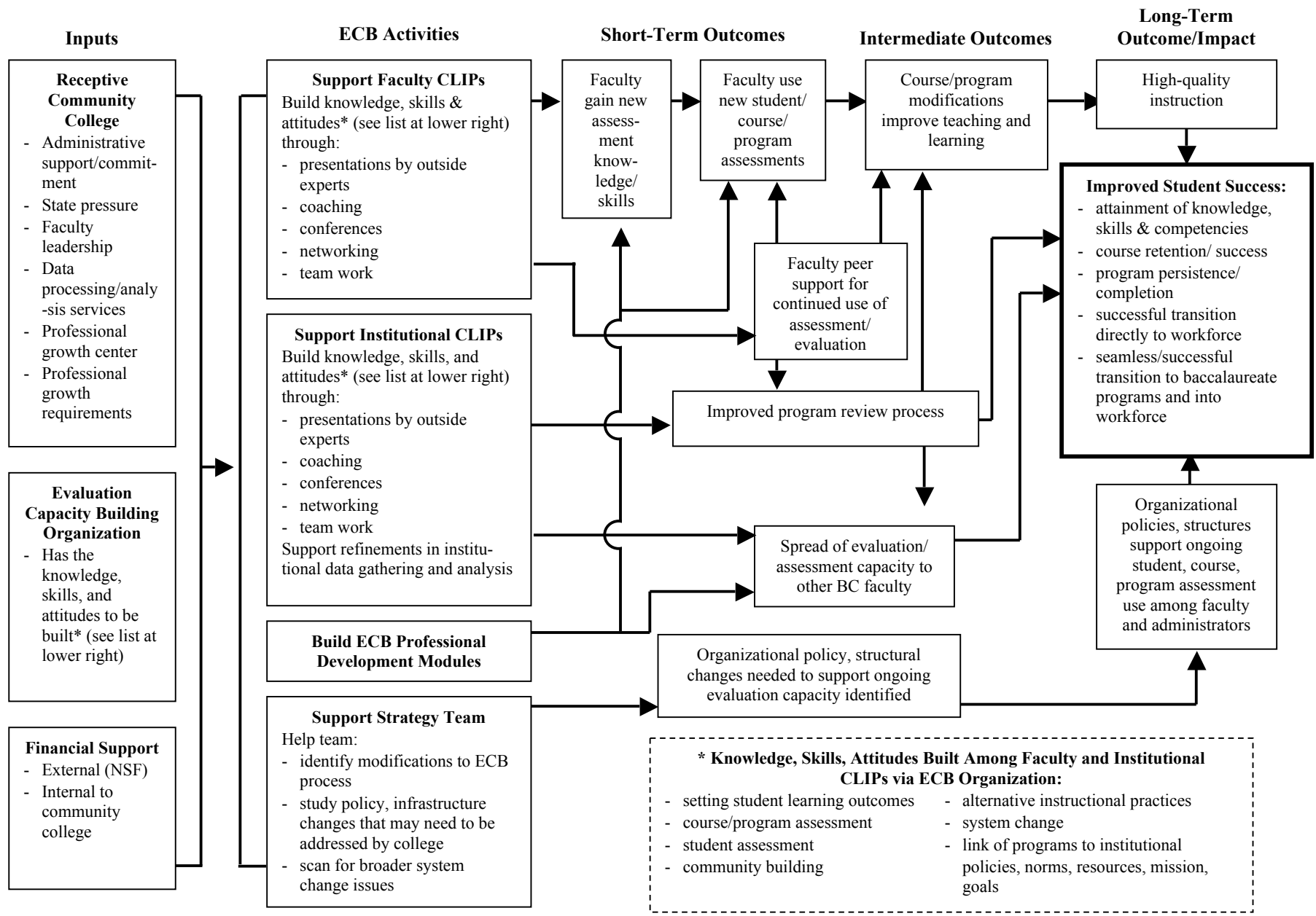


Figure 2. Original CLIP Evaluation Capacity Building Logic Model

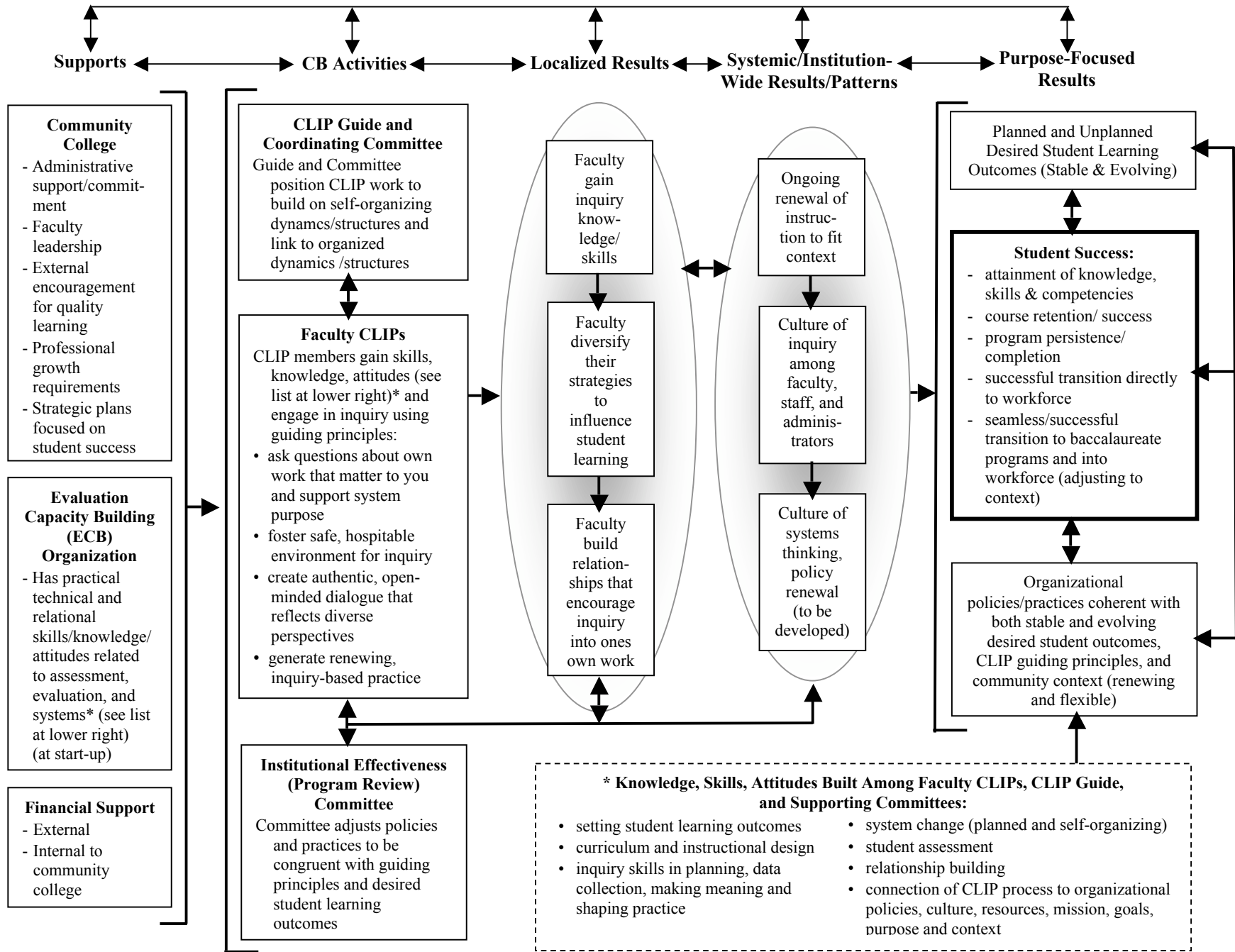


Figure 3. Logic Model Explaining CLIP Application at Bakersfield College

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