



Diploma in _____
Managing Quality in Higher Education

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CAPTURING GLOBAL BRAINPOWER

Idea generation is universal throughout the evolution of methods and tools for quality improvement. The idea generator with the longest time of validation across societies, cultures, schools and organisation is *Ideas Unlimited*. It is a natural partner to Quality Control, Quality Management and the Quality Sciences. This chapter will introduce one of the top group survey research tools in existence today.²³⁹

The validation of Ideas Unlimited theory and practice has occurred globally and cross-culturally since 1925. Its relevance for problem identification and solutions will continue to increase through the 21st century. The escalating capabilities of electronic communications will continue to facilitate the penetration of the method to places on the globe where there have not been applications to date, but where it is needed. Ideas Unlimited is being propelled by the revolutionary results of global electronic networking. In 2017 that networking facilitated *Real-Time Ideas Unlimited Data Capture*. Dr. Krone has continued to be the leading Ideas Unlimited scholar, teacher and researcher to the date of this book's publication, 2017.

The fundamental purpose of the Ideas Unlimited method is to creatively and rapidly improve organisational performance and productivity. Ideas Unlimited solves the historical enigma of organisational creativity being both needed and suppressed. It does that anonymously capturing creativity and know-how from people to achieve policy, strategic, and process organisational innovation. It enables top executives to efficiently achieve innovation through the simple process of cultivating creative people.

Workers know a lot and we need to capture their knowledge.

– Dr. W. Edwards Deming seminar Costa Mesa, California, August 2, 1989

The basic principle of Ideas Unlimited is that those who do the work possess the know-how and the ideas to improve it. They are the leadership's best innovation resource. But they need a method, motivation and facilitation to allow the capture of their ideas in a non-threatening environment.

Human progress accelerated when ideas could be recorded. Ideas are the tangible output of the mental images the human brain and mind conceive. Applied brainpower has been the engine for change through the ages. Brainpower created the great philosophies, literature, art, music, military strategies, scientific discoveries, constructions, creations and inventions of the world. Ideas have consistently changed the world for better or worse.

Change will accelerate in the future due to the real-time capability to share ideas as computers communicate universally around the globe and into space.

These are the four major sources of ideas:

1. Libraries, the traditional source of ideas previously documented.
2. Learning from observation.
3. Capturing unrecorded ideas people have in their minds.
4. The Internet, the world's new gold mine for documented ideas.

Ideas Unlimited focuses on Source #3. The information revolution has accelerated both the need for effective gathering, documenting and organising of ideas and the problems of doing so. Change is experiencing exponential growth. Increased job turnover rates reduce the know-how level in business, government, schools, hospitals, military services and not-for-profit entities. Formal education teaches fundamentals that are not easy to apply for specific tasks.

Each company, agency, or organisation has its unique equipment, facilities, interrelationships and procedures. Group instruction gets marginal grades as it is often given at the wrong time and given by the wrong instructors about things that are irrelevant to the learner. On-the-job training (OJT) is needed but hard to get, hard to give, and often of poor quality. What is needed is a know-how aggregating and disseminating system which can rapidly and effectively capture ideas in the individual brains of the organisation or entity.

Identifying problems and searching for their solutions are the fundamental challenges in government, in business, in education, and in life. Few trends in management have been as consistent as the increasing awareness of leadership to the importance of capitalising on the ideas of those who actually do the work throughout the structure and functions of the organisation. Ideas Unlimited's relevance to society has continually increased as public and private system leadership, over the nine decades since the origin of the method, grew to realise that the skills, know-how, problems, and solutions of people are the best resource for continual improvements. It is not an experimental tool. It has been increasingly validated across systems, cultures and countries. It will not be a passing fad. Its scope reaches from personal productivity to international and beyond earth problem-solving. It has a huge history of past applications and an unlimited future.

Plato (427–347 B.C.) is credited with the first Doctrine of Ideas and Will Durant concluded: "Therefore the essence of higher education is the search for ideas."²⁴⁰ Thinking seriously about ideas has been going on for at least 2,400 years. And we can assume that the thinking of humans on earth for many years was a major factor in survival of the species.

In 1925, Dr. C.C. Crawford, a young United States university professor, became frustrated with writing on legal paper voluminous notes and references for his first textbook and then wondered what to do with all those notes. He invented a method to write ideas separately on small slips of paper which could then be classified into the subjects which would become chapters, sections, paragraphs and sentences of the book. Later he titled that method *The Crawford Slip Method*. As Professor of Education at the University of Southern California during his tenure there (1926 to 1956), he taught his research method to graduate students which became the basis for his extensive consulting. His personal library contained books, papers and hundreds of reports written for clients or colleagues.

In 1981, as Systems Management professor at the University of Southern California, Dr. Bob Krone encouraged Dr. Crawford, then 83 years old, to return to USC from his retirement to head a small interdisciplinary teaching, consulting and research unit called *The USC Productivity Network*. It was based exclusively on his Crawford Slip Method.

During the following eleven years until Dr. Crawford's death in 1992, Dr. Krone managed a group of academicians and business professionals working with Crawford to help him revive his method and to publish research results in journal articles and books while also integrating the method into university courses.

In 1985, the USC administration approved Dr. Krone's six-month sabbatical research to investigate automation of the method. That led to the computerisation and online use of the method and to the streamlining of the method under the name *Ideas Unlimited*. Krone Associates was awarded United States Trademark Registration Number 2,347.492 in the year 1998.

During the years since Dr. Crawford's death in 1992, Krone Associates have expanded the teaching, consulting, and publishing of Ideas Unlimited to Asia, Latin America and Europe as well as throughout the United States. Dr. Krone's Masteral and Doctoral level candidates, from 1981 to 2017, have continued to validate the power of the method across a wide spectrum of applications.

Characteristics Summary:

- 1) Reduces the distance between decision makers and workers;
- 2) A systems approach;
- 3) Economic feasibility;
- 4) Democratic;
- 5) Fixes problems with multi-purpose data;
- 6) Invents new ideas;
- 7) Perception of simplicity-sophisticated reality;
- 8) Macro to micro penetration;
- 9) Facilitates organisational diagnosis; and
- 10) Improves performance and productivity.

Benefits Summary:

- 1) A research tool meeting science criteria;
- 2) Fast and relatively inexpensive;
- 3) High quality and quantity of data;
- 4) Elicits ideas for innovations that would otherwise remain untapped;
- 5) Actually invents ideas both from the individual respondents and from the merging of similar ideas in the data analysis process;
- 6) Can penetrate to whatever level of detail is needed from top strategy to assembly-line improvements;
- 7) Removes the fear barrier from participants to candidly make their views known;
- 8) Reduces the distance between decision makers and workers;
- 9) Contains inherent data organisation and reduction protocols;
- 10) Fosters “buy-in” to the team mission;
- 11) Has no cultural biases or limitations;
- 12) Adapts well to online use for globally dispersed focus groups;
- 13) Those being surveyed need no previous experience or training to fully participate; and
- 14) Improves performance.

IDEAS UNLIMITED: DOING IT

Research using Ideas Unlimited takes planning and preparation. There are exceptions to that rule when a discussion leads spontaneously to a “*Target of opportunity*”. Planning involves:

- 1) discussions with the client;
- 2) creating of one or more focus groups;
- 3) selecting the best Ideas Unlimited tools for the task;
- 4) the design of targets to solicit responses;
- 5) the determination of manual, online or mixed delivery mode;
- 6) considering data gathering and storage; and
- 7) identifying the format for feedback to the client. Brief explanation of those process steps follow.

Client Discussions

Every use of Ideas Unlimited has a client – a company, agency, organisation, school or entity that has a need. The Ideas Unlimited facilitator/analyst and the client leadership will collaborate to use the power of the method to meet the need. As an example, in 1993, the leadership of the NASA sponsored Strategic Avionics Technology Working Group (SATWG) asked Krone Associates to capture the brainpower of 166 United States aerospace professionals from NASA Headquarters, NASA field centers, aerospace prime contractors, leading avionics systems suppliers, small business supporting NASA programs, professional societies and selected universities.

There were five major Focus Area subjects:

- 1) U.S. National Aerospace Industry Policy;
- 2) Technology Commercialisation;
- 3) Manufacturing, Operations and Education;
- 4) Research and Technology Development; and
- 5) Institute of Electric and Electronic Engineers (IEEE) Parts for Space Systems.

Krone Associates discussions with SATWG leadership, Dr. Kenneth J. Cox, prior to the Houston conference, produced an agenda for the four days, July 19–22, 1993, that included a total of two hours and nine minutes of workshop time dedicated to the five Focus Area subjects.

Ideas Unlimited targets were designed for each workshop that generated:

- 1) Root causes for existing status within the Aerospace Industry;
- 2) Existing problems, challenges and threats; and,
- 3) Recommendations for improvements within the five Focus Areas.

An average of fifty conference attendees participated in each of the five workshops. To optimise idea capturing, all targets were installed into a computer with monitor in the hotel lobby so any conference participant could type in responses as they walked from session to session. A total of 3,500 responses to the targets, written individually, simultaneously and anonymously on small data pages, or typed into the computer, were captured. Analysis and classification of that data produced a 264-page Final Report. Positive feedback from aerospace professionals continued for years after that report.

That example represents the more complex applications of Ideas Unlimited. But whatever the application – from a 15-minute one-target workshop to a four-day professional conference – the key to success is a-priori client discussions so the *Why?*, *When?*, *Who?*, and *How?* questions are answered to facilitator's and the clients' satisfaction.

Focus Groups

The term "Focus Group" is used to identify any number of people being surveyed with Ideas Unlimited. There is only one important criterion for anyone to be a focus group member. He must have experience with, and know-how about, the subject under investigation. Given that the criterion is met, gender, race, nationality, religion, or political ideology is not a variable for success of the application. Experience shows that ages ten years and older can productively contribute their ideas.

Those with speech handicaps need not be excluded since responses are written. The method has been used with blind focus groups where their spoken ideas can be recorded accurately.

The fact that the response population for Ideas Unlimited is selected using the research subject as the main variable is different from statistically based surveys where random identification of the population surveyed is required. Another feature different from other methods is that focus group membership can be changed throughout data gathering for a project. Results will not be biased by such changes; it only expands the diversity of those contributing their ideas. That flexibility is a unique advantage of Ideas Unlimited.

Target Design

The term “Target ” is used for the question or statement created to stimulate responses from those in the focus group. The design of targets is critical for success. It is one of the two most important skills for the Ideas Unlimited facilitator. Data classification, organisation and reduction is the other critical skill. A distinctive feature of Ideas Unlimited databases is that they are **performance oriented**. They identify what is wrong, imperfect, deficient or in need. And they contain large quantities of solutions, recommendations and fixes for those problems. Correct target design achieves those database inputs. Figure 9.1 provides a generalised targeting model.

NOUN OR NOUN PHRASE: HOW TO _____

- * Amplifying statement or question
- * Amplifying statement or question
- * Amplifying statement or question

Figure 9.1 Ideas Unlimited Target Model

The noun or noun phrase pins down the subject under investigation. The “How to___” wording is what captures the performance oriented responses that tell “How to improve”. Amplifying statements are created carefully to lead the respondent into different segments of their memories and experiences relevant to the target and to ensure that the respondents search their memories to capture their anonymous, individual and independent ideas for problem solving. Figure 9.2 is a specific subject example.

COST REDUCTION: HOW TO STOP OUR INSTITUTION’S WASTE, LEAKS AND LOSSES

- * Remember specific wasteful incidents.
- * Tell leadership how to do more with less.
- * You are guaranteed anonymity for all responses.
- * If you had complete institutional control what would you change to reduce costs?

Figure 9.2 Ideas Unlimited Solutions Target Example

There is one set of targets where the *How to* is not used. Leadership of any entity continually faces two challenges – identifying problems and finding solutions for those problems.

The targets soliciting solutions should always include the “*How to*” clause. But, targets designed solely to identify problems have different wording. Figure 9.3 is an example.

LOW MORALE: WHAT PROBLEMS EXIST IN OUR INSTITUTION?

- * There is dissatisfaction within the staff of our institution.
- * What do you believe are the decreasing morale causes?
- * Remember policies, procedures, actions or events that impacted your morale negatively.
- * Write them all in your responses.
- * Anonymity of your views is guaranteed.

Figure 9.3 Ideas Unlimited Problems Identification Target Design Example

Note that recommendations for solutions are not asked for in Figure 9.3. The “Diagnostic Workshop” principle resembles a visit to the medical doctor. First, he wants to know where the problems and pains are; then, the diagnosis is made and prescriptions for fixing the illness are made. If time is available there can be benefits in targeting the focus group first with a target aimed at only identifying the problems then giving them the follow-up target seeking solutions as the example does in Figure 9.2.



There is an important difference between the problem and the solution targets response databases. If one asks only for problems he or she will not get improvement or solution ideas. But if one asks for solutions, the nature of the problems that drove the wording obtained in responses will reveal the problem – perhaps not as specifically as the wording obtained from a problem-focused target but what caused their recommendation will be apparent. If the facilitator gets a “Fire the boss” recommendation, he or she knows that leadership is the problem. But, if he gets “Our leadership is weak” from a problem target, he does not have a specific solution in the database. That distinction between description and prescription is fundamental. So, when time is very limited, the solution target design given in Figure 9.2 is always used. **What is needed is a database of performance improvement ideas.**

Before giving targets to the focus group, the facilitator should rehearse them with a few, test people to sharpen their precision through editing. He should have this small test group write some responses. Such testing leads to final editing of targets for optimum results.

Face-to-Face or Online Delivery

The Internet has revolutionised communications between individuals, groups, organizations, industries and governments. Real-time idea transmission is becoming a reality. The fundamental principles and goals of the method did not change, but the electronic delivery system expanded applications from the board room, agency office, or school classroom to anyone cyberspace can reach. Simultaneously data storage for Ideas Unlimited began to transition from boxes filled with small slips of paper to databases in computer memory.

But uses for the face-to-face delivery mode remain. There will be situations where using computers or electronic voice input are not feasible or desirable. Applying the method in schools, hospitals, companies, agencies or organizations often is more effectively done manually. It can be easier for the client developed focus group in face-to-face meetings of small groups. Also fitting Ideas Unlimited targets into one-on-one intensive consulting interviews works better manually.

Mixing Manual and Online Modes

Increasingly mixing manual and online modes in applications enhances productivity, quality and quantity of responses. As client time availability has decreased and method effectiveness has increased, a 10-minute one-target workshop, either online or manually, has become more frequently used. At the end of a short manual workshop, the focus group are given an e-mail address. It's a neurological fact that the mind creates new ideas on a subject even though there is no conscious focusing. As we brush our teeth the next morning a new “Aha” may pop out. The reverse process can also work. Sometimes a client and analyst will agree that a face-to-face manual session can be helpful after a series of targets have been addressed online by a focus group.

Focus Group Instructions

Those responding to targets need some brief instructions. For online electronic delivery the focus group is told of the subject to be addressed; anonymity is guaranteed for their responses; and they are asked to reply via e-mail or to input to a blog with as many responses that come to mind.

It is better to have only one target per electronic message. Clients are asked to respond individually and independently from their own experience and know-how. They don't need to wait for their best answer but to type whatever comes to mind with freewheeling thinking. They can send later e-mails if new ideas come to them for that target. If they asked for response examples, they are not given any because it will narrow their thinking which will exclude areas where they have personal experience thus limiting their mental searches. They are simply told to send whatever ideas, intuitions, recommendations, or solutions they have for the subject of the target. The facilitator can offer to send them later some of the data analysis and classification, but the focus group is never sent the entire raw database for it could compromise the guarantee given to all for anonymity.

Client Feedback

Part of the initial discussions with the client needs to address the subject of what the feedback products will be. There is a set of options. The spectrum ranges from instant feedback to a focus group of some of the ideas collected during a workshop, to a verbal report at the end of a day's set of meetings on recommendations that Ideas Unlimited targets captured, to a 264-page detailed report as was done for the 4-day NASA sponsored conference described at the beginning of this chapter. Whatever the complexity of the feedback products from the use of Ideas Unlimited, the client receives recommendations for solving problems, reducing waste, improving processes or accomplishing more output with less input. It's necessary to point out here that the definition of "Client" includes the facilitator when he is using Ideas Unlimited for his personal needs.

Chapter End Thought

Now we are in a new millennium where the winners and the losers in the information age are certain to be differentiated by brainpower. Knowledge-based organisations will be the survivors and nations which amass knowledge most effectively and deploy it efficiently will be the superpowers of the future. Higher education professionals who prepare themselves to teach in, and about, the Information Era will be the leaders of this millennium.

The empires of the future are the empires of the mind.

– Winston Churchill, *The Futurist* (March–April 2004)

PART IV: FUTURE QUALITY NEEDS IN HIGHER EDUCATION

Since World War II, improvements resulting from the Quality Sciences and Quality Management have been steadily increasing in scope. What remains to be done? Parts I, II and III have given a comprehensive history and current status of the Quality Sciences as a survey of the contributions of pioneer professionals. The reader knows why Quality Control and Management were created and how it has expanded from industry and manufacturing into service, defense, medicine, health care, space, environmental studies and most recently to social responsibility. The reader has seen how quality thinking and programs spread globally from Japan after World War II and how the American Society for Quality (ASQ) became the premier professional organisation to teach, sponsor and market quality. The reader has studied the progress of quality departments, courses and programmes in higher education, seen the definitions of “customer” for that education, and created a systems prescriptive model for college and university administrators wanting to add Quality Sciences education to their schools. And this book has gone further in seeing how the concepts and tools of quality should be applied to transform higher education for the 21st century.

The present, 2017, is much different from the past and the future will be exponentially different than the present. Science and technology have made spectacular advances. Those advances are responsible for significant improvement in the quality of millions of lives. Those advances in productivity also played a role in preventing an even more acute global economic depression with catastrophic outcomes worse than has been experienced to date. But time is not on humanity’s side without reversal of many declining societal trends. And some of those science and technology advances have involved Mephistophelean bargains with sinister negative potentials for Earth and its inhabitants.²⁴¹ Major societal transformations for improved quality are needed.

This last part of the text challenges global educators to make a paradigm shift in their vision. It identifies those needs in business, in government and in global society where quality is missing or improvement is badly needed. It will overview needs for higher education as the 21st century gets underway in a global environment of uncertainty, adversity, turmoil, and change. It places a responsibility on educators to be leaders for this major advancement of the Quality Sciences. Addressing the macro needs of humanity has been a focus for sociologists, political scientists and theologians throughout the history of education. In 2010, the American Society for Quality included “Social Responsibility” in its spectrum of goals. There is now the recognition by leadership within the Quality Sciences that “doing better with less” remains a critical challenge. The fundamental reason for the Quality Sciences was the need to create more for business and society at lower costs. A major task of higher education is to teach quality theory and the application of that theory, for the continual improvement of business, of government, of science, of technology, of itself, and of global society. Chapter 10 will examine quality needs in leadership, policy and law while Chapter 11 will focus on productivity. Finally, Chapter 12 will look at individual, corporate, and governmental changes that are needed to support quality improvement in higher education around the world.