THE POWER OF HEXAGON AS AN ORGANIZATION DEVELOPMENT PROCESS

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Abstract: *This article focuses on the use of Hexagon, a "thinking through" process. It assesses it through various activities such as strategic planning, negotiating, or organizational assessments. It is the authors' view that engaging people in groups to think and connect with one another at the ideation and conceptual levels calls for a different technique that will allow them to experience that "the whole is greater than the sum of its part." The article articulates the rationale of this discourse and documents the engagements as an action research and illustrations of the possible uses of Hexagon. The results show a significant difference in the level of awareness before and after the use of the Hexagon technique and between and among groups in terms of utilization of this very technique. It can be concluded that the effectiveness of the Hexagon technique raises the participants' level of consciousness both at an individual and group level and that its use cuts across different types of activities, participants and countries.*

Key Words: *Complexity, connectivity, conceptual perspective, collective intelligence asset,, meaning making, world café, sense making, systems thinking, information age, connectivity age, whole brain literacy.*

Introduction

People gather together for various reasons. Inherent to the gregarious nature of human social systems is the longing for a sense of belongingness and oneness with others and things in the environment (Capra, 1996). While each person exhibits his/her own distinct identity, integral to the self, the paradox of his/her own identity is intimately linked with his/her connectedness with other identities of which s/he is a part (Talcott, 1951). The need to respect, relate to, connect and identify with other individuals is not only vital for socialization but also to the sense of communion with other beings in the "web of life" (Capra, 1996; Gleick, 1987; and Waldrop, 1992).

However, the challenge in making connections with others and developing a sense of community has become more critical with the advent of the worldwide web communication and virtual social networking modalities, such as, for example, Face Book, Twitter or My Space, which raises the question of whether one is able to connect and identify with other human beings in 'sharing

meanings' and have various levels of experiences. It should be noted that for the purpose of this article, 'sharing meanings' means exchanging, dialoging or sharing different interpretation of events and experiences with others in the group.

Another way of looking at all the implications of the term 'shared meanings' is to address the following question: how does a facilitator enable participants with various perspectives, varied experiences and diverse levels of understanding to come to a common level of consciousness of a shared experience? This article precisely addresses this issue.

To this end, the authors explore the Hexagon technique, an idea-generating and idea-connecting process, so as to determine whether it provides a way of raising the level of consciousness of a shared experienced and operates as a most creative and generative approach to group activities. To make this determination, action research was employed.

The Hexagon technique relies on a series of steps which the following questions encapsulate: How does one as member of a group get to experience, in a "sense of meeting" and feel a "sense of identity" as one with the group? How does one achieve this reality beyond the visible and visceral connecting processes, such as, for example, holding hands, extending an embrace or a hug? How does one experience the reality of oneness without losing one's identity or distinctiveness and then get the feeling of

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being affirmed and connected? Is this event or encounter simply an emotional experience or a figment of one's imagination at one ripe moment that happens only as it happens? Is there a process tool for connectivity which one can utilize to discover, learn, develop, evolve, create, and experience at the level of the cognitive, psychomotor, and affective domains? How does one as an individual in a group process connect with the "living corporate person", the institution or organization, in a most practical and functional way?

This action research aims to address all these questions which are at the core of the Hexagon technique. After reviewing the relevant literature and articulating the objectives and hypothesis in parts one and two, this article focuses on the process design and methodology of the action research respectively. The results will then be considered and analyzed.

1. Literature Review
- The 'World Café'

The so-called *World Café*, designed by Juanita Brown and Tom Hurley (2002) and Juanita Brown and David Isaacs (2005), can be defined as a modality, methodology and process for "awakening and engaging collective intelligence through conversations that matter." This process, referred to as the art of asking powerful questions, has been used in many conferences and events around the world where significant topics get attention and become the focus of collective meaningful conversations (Vogt, Brown, and Isaacs, 2003). It provides guidelines to those who plan to host *World Café* events in an effort to bring out a sense of community.

As a methodology, the *World Café* provides an opportunity for individuals in a group process or engagement to generate ideas and connect these with others to arrive at a better and deeper understanding of the topic at hand. However, the process is applied in a way that enables each participant to achieve an individual as well as a collective level of understanding. This collective level is often referred to as collective consciousness.

Like the Hexagon process, the *World Café* provides an approach to generating levels of understanding of any chosen significant topic of conversation among group participants.

However, in a departure from the Hexagon technique, the *World Café* focuses solely on awakening and engaging the group's consciousness on the topic that matters - that is the one identified by the designer of the session or conference as most relevant - and does not provide that critical link in thinking through "what matters" both at an individual and collective level of consciousness.

- The Hexagon Technique

As a tool for "thinking through," the Hexagon technique is an adaptation by the authors from the manual entitled "Thinking with Hexagons" developed by IDON Limited (1996). The choice of a hexagon shape for the technique of thinking/learning connectivity in complexity is purposive of the qualities that a hexagon has. With its six equal sides and points, much more than in a square and unlike a rectangle with only has two sets of equal sides, only the hexagon can concretely symbolize the principle that all the participants have an equal (i) opportunity, (ii) right, (iii) chance, (iv) point, (v) space and (vi) choice to connect with one another (IDON, Ltd. 1996).

The Hexagon technique begins with idea generation, the key question being "what matters." A topic of concern to all the participants is then formulated, posted and presented to the participants. The participants are to work as a team to "make sense" out of all the ideas expressed on the cards. This process is premised on the assumption that at the core of every person lies a basic need to "make sense" out of something new, different and complex in a given situation. This ability and need to "make sense' is basic regardless of culture, creed, race, gender, age and expertise (Weick, 1995). Their task is to make clusters out of the ideas displayed to a maximum of seven cards per cluster. With each cluster of cards given a cluster label, the participants are then to arrange and connect these clusters with looping or linking arrow lines. When the participants are able to view these cluster maps as a whole, they are to come up with a story line and a composition that tells coherently the meaning of the cluster maps of meaning crafted on a flip chart.

The Hexagon technique, simple and robust, allows all the participants working in groups to create meanings out of the variety of ideas on hand and make sense of their own cluster maps of meaning as well as those in the other

groups when connected together as a whole.

- *Is there a Link that Matters?*

A human being is the basic unit of any social system – be it a family, peer group, functional work team, organization, community or society as a whole. There is no concept or construct of a social unit apart from the individual person as the basic, integral component to the social system (Talcott, 1951). This raises a number of questions: Apart from common experiences, similar events, same situations, shared values and vision, which have been used as building blocks in team or organization development and community building, what else makes one feel and do to experience "a sense of oneness and wholeness" (Weick, 1995) with others in a given context? What else is there in every individual person that links with the larger human social system? How can the Hexagon technique be used to build "circles of community" (Newton and Wilson, 2003) who can share a common understanding of ideas and ideals? Can this be factored in, designed and facilitated in a group interactive and creative learning process as part of a set of ODI Activities? Can learning connectivity in complexity, i.e., at the deeper or higher level, be facilitated in a structured process of engagement?

When a baby is born, her/his genetic, blood, emotional bonds and socio-cultural connections with the family are by far the most concrete empirical evidence of the baby's connectedness to a larger human social system. As the baby continues to grow and become a full human being, interactions and socialization with all other members in the circles of relationships enable the baby to acquire and develop personal habits and characteristics that reflect his/her links to the social group s/he is coming from. These are seen as norms, beliefs, values, traditions, and cultural practices that make up part of the collective identity of the person with his/her social roots. When individuals are recruited as members or employees of an organization, what then could be used to facilitate the process of integrating them to feel, identify and think one with the whole organization (Mayer, 2004)? The authors are advocating that there is a way beyond psycho-social-cultural-emotional experiences that could enable individuals in groups to experience oneness and wholeness with the larger whole.

The Hexagon technique with its "what and where is the link that matters in making sense" enables participants from a whole variety of backgrounds to experience and see that "the whole is greater than the sum of its parts." Is it both the choice of content (i.e., the topic or question under consideration which is referred to as "what matters") as well as the Hexagon process (the creative flow in sense making) that facilitate multiple processes (thinking, learning, creating/caring) of connectivity in complexity? A follow-through question could then be: Can the Hexagon technique enhance one's understanding in terms of connectivity in complexity in organizations?

- *Community versus Individual*: *the Link that Matters*

When groups, associations, communities and nations, create, organize, mobilize and maintain community circles, how do individuals within the group circles connect with one another in a sense of "oneness?" As Harman (1988) stated, "*every knowledge system is shaped by the characteristics of the society that produces it. However, the paradox of this knowledge system lies in the contradicting functions it serves in creating and preserving the community. While on the one hand, it serves as a common reference point for the posterity of communal identity, it keeps everyone else from growing and thinking differently*." This raises a challenging issue.

While it is true that we are connected intimately with our social roots, where we share events, experiences, artifacts and norms in common with others, what do we do with those who we do not even know and come close to knowing except at the time or in a "sense of meeting" in a session of our choosing or at times by sheer happenstance (Herman 1998)?

The challenge is to discover, develop and contrive that process link in a conversation process on "what matters" (Lynch, 1986), which in turn raises the issue of whether there is a link to "what matters" to individuals, in groups and a community as a whole. In other words, is there something which individuals share when they connect and make sense among diverse ideas and constructs and attempt to create meanings? How do we tap into that link in ways that everyone in the group, sharing the same experience, can identify with?

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- Knowledge Workers versus Web Workers

The pace, complexity and depth of change in today's world is unprecedented. Advances in sciences have been accelerating at a dizzying rate. Most notably, information technology has revolutionized the way we work, relate and communicate (Toffler, 1980). In the course of a few decades, the pace of communication has dramatically accelerated thanks to the switch from analog to digital technology.

The differences in the work patterns characteristics of the age of industry on the one hand (Toffler's Wave 2, 1980) and the age of information (Toffler's Wave 3, 1980) requires new skills and abilities. Yet, with the emergence of the conceptual age (Pink, 2006) and the age of connectivity (Zelenka, 2007) new sets of skills and competencies are required. In short, we have moved away from the age of information and its knowledge workers and entered the age of connectivity and its web workers (Zelenka, 2007). As the need for linkages are becoming more intense, people are gradually making changes and adapting to new ways of learning, working, shopping, dating, and communicating.

Knowledge workers, characteristic of the information age, have been defined as those who "create and manage information massaging it into intangible knowledge goods" (Zelenka, 2007). They differ from web workers of the connectivity age in that the latter "create and manage relationships across knowledge goods, hardware and people" (Zelenka, 2007). Table 1 below, developed by Zelenka contrasts knowledge work and web work, showing the shift of priority from knowledge to relationships. What matters is no longer the formal organization of people (the corporation) but the "individual people or ad hoc groups of people" (Zelenka, 2007). These distinctions are of great import, especially to those working with individuals, groups and organizations and seeking to facilitate thinking/learning experiences in connectivity and complexity

There is a distinctive shift in focus from the "creative/generative" function of the knowledge workers, that of producing "intangible knowledge goods," to the "creative/connective" function of the web workers, which is to manage "relationships of ideas (knowledge), things (hardware) and relations (people). This shift which is subtle,

strategic, systemic as well as leveraging must be appreciated from a holistic perspective. To an OD Process Facilitator, the challenge is on how to design a process and engage

Table 1- Knowledge Work as Compared to web Work

	Knowledge work	Web Work
Who Matters	The corporation ,formal organization of people	Individual people or had hoc groups of people
Style of Work	Busyness of step by step productivity	Burstiness of discontinuous productivity
Currency	Money	Attention
Business model	Proprietary	Open
Information technology	Desktop installed often heavy user interface	Web-based, software as a service, had doc combinations of tools, lightweight user interfaces
Priority	Knowledge	Relationships
Creative process	Building, creating	Composing, assembling
Value	In intangible information goods	In the relationships that aggregate, filter, and manipulate distributed intangible goods

Source: Anne Zelenka. "From Information Age to Connected Age". October 6, 2007. 3:00 p.m. PDT. 22

participation in order to make the connections or relationships in knowledge and arrive at a higher level of consciousness or understanding of broader themes or concepts.

- The Age of Knowledge versus the Age of Connectivity: Implications

There is a need to develop this level of consciousness of those who lead and manage complex situations, facilitate thinking through issues from multiple perspectives, and integrate their greater complexities. Hence the necessity to design a thinking/learning process in instruction/organization development intervention that uses a framework appropriate for both the age of information and connectivity, that is, a process that links

knowledge in a "meaning-making" way through generative/creative activities. The use of Hexagon has become crucial in a world of fast-changing and complex times given that:

- A multitude of things/tasks/issues come in multiple dimensions viewed from the diversity of worldviews where one is faced with the challenge of connectivity in complexity to arrive at broader, greater, higher and deeper level of understanding between and among peoples (Tayko and Talmo 2010);

- Communication links, information access and unprecedented speed and volume of information dissemination create an implosion and explosion of information where one is faced with the challenge of thinking through things/tasks/issues to see "whole as greater than the sum of its parts;"

- Professional expertise and experience in various fields (engineer, lawyer, accountant, entrepreneur, etc.) have sharpened and defined the boundaries of specialization where the challenge is how to tap and get the best of everyone's talents for the greater good of the whole system without losing one's professional identity or the special sector each represents; and

- Diversity of interests among peoples at different stages of development coupled with competing priorities and conflicting choices become blurring factors to the ability identify "what matters".

In the light of the above challenges, the documented action research is reported as follows.

2. Objective and Hypothesis of the Action Research

The purpose of this action research is to develop and utilize a process tool that provides opportunities for participants to both generate diverse ideas and concepts individually and build on them creatively and collectively to a level of conceptualization, realization and understanding where every participant in the group as well as the group as a whole can experience a collective sense of meaning i.e. "connectivity in complexity learning" as a community of learners, i.e., "connectivity in complexity learning." Specifically, the action research determines the consistency and usefulness of the process tool (using the Hexagon technique) in enabling the participants in any type of activity, setting, and engagement to "think/learn/create/care/connect" with others on "what matters" for connectivity in complexity learning.

The following hypothesis was then developed: Does the Hexagon technique generate the connectivity in complexity learning in a group and groups of groups, thus experiencing the sense of being to see "the whole is greater than the sum of its parts"?

3. Process Design

To enable participants to "think, learn, create, care, and connect" with others either in a diverse or homogenous group in a structured-facilitated session, the authors designed a process based on an eclectic combination of principles, frameworks and processes drawn from Senge (1990), GKA's (1995) systems thinking as action tools, and "whole brain literacy" concepts. (Tayko, 1995 and 2010).

Their goal is to raise the level of awareness and consciousness of participants on "what matters" to them as they identified with the topic of concern chosen as a focus of the activity. Participants were engaged to experience learning connectivity/complexity processes.

The design of the process made use of "sense making," a way of creating and dialoging on meaning towards building a sense of belonging and commonality. The process, which uses the Hexagon technique, involves the four following phases (Tayko and Soponkij, 2008):

- *Phase One*: *Drawing from the wellsprings of meaning identified or labeled in single words or concepts.*

This is the process of touching on the inner wellsprings of one's being where participants are invited to introspect focusing on a given question. They are to sense from within the self "what matters" to them on the given or chosen topic. Participants are to generate ideas or single words that come to mind when they think of the question. Every word or concept is written on a hexagon card; one word per card. Participants can generate as many as they can within the allotted timeframe. All the hexagon cards generated by each participant are collected, counted and randomly grouped. This enables participants to cluster concepts written on cards and create meanings.

- *Phase Two*: *Making Connections of Meanings in a Brainstorm Process of Cluster-making.*

This phase is both a collective and creative process. Working in small groups, with a hexagon cards and cluster the cards that "made sense together" to a maximum of seven hexagon cards per cluster (IDON, Ltd. 1996). Each cluster can range anywhere from seven cards to one since it can happen that one hexagon card bears an idea so unusual that it can only stand by itself in a one-card cluster. No card is discarded even when in the event it comes as a duplicate. Duplicates are linked to other clusters with which they share a common sense.

By connecting meanings through a group process, individuals in the groups begin to share more meanings and generate a greater and broader understanding of each other in the group. Working on "cluster building," participants are to think and agree on a "label" or a "title theme" for each of the clusters crafted. This collective/generative group thinking process directly and indirectly creates a sense of belongingness and community within the group and the whole group.

- *Phase Three: Composing a Synthesis of Meanings in a Story of Essence.*

"sense of play," participants are asked to connect the ideas and images written on the

This phase enables each small group to integrate and synthesize the clusters of meanings. The small group's story is given a title as a story line that weaves all the clusters composed by the small group into one composition. The assumption here in terms of process is that the small group can create its own story and develop collectively as shared meanings (Ackoff, 1981). Then the facilitator encourages the whole group to make connections of the clusters maps of the small groups and come up with the whole group's "story of essence." This is when the facilitator assists the whole group to see the greater and larger meaning of the story of the whole group as the whole is greater than the sum of its parts.

- *Phase Four: Experiencing, Visualizing, and Appreciating the "Collective Intelligence Asset (C.I.A.)" Phenomenon in Affirming the Sense of Community or Collective Consciousness (Katalinohang Gintong Bayanihan (K.G.B. is the Filipino translation of* C.I.A.).

Table 2 - Matrix of Country, Type of Activity, Composition of Participants,
Number of Sessions held and Success Rate

Countries	Type of Activity	Composition of Participants	No. of Sessions	Success Rate*
Philippines	Initial Stages of OD Engagement Conferences	Management & Staff of various organizations engaged in OD. Delegates participating in Conferences.	150 5	100% 100%
Brunei	Training Program for Managers with Ministry of Development Officers	HRD Managers from SEA involved in SEAMEO-Voc Tech Engineers as Officers/ Executives of the Ministry.	1	100%
Indonesia	OD Process for Management	Management & Staff of a large Company.	1	100%
Pakistan	Orientation of a Development Program	Ministry at National Officials and Provincial Officers.	5	100%
Bangladesh	Overview/ Orientation of the Development Program	Ministry at National and Provincial levels involved in OD.	12	100%
Thailand	OD Classes in MMOD and PhDOD	MM OD Students in 12 Batches and PhDOD Students in 5 Batches.	17	100%
USA	Conference ODN Group	Multicultural group session.	1	100%

*"Success rate" means ranging between 4 to 5 on the scale of 0 to 5.
*"Unaware rate" means ranging between 0 to 3 on the scale of 0 to 5.

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This phase is a reflective and appreciative process initiated and engaged by the Facilitator in a dialoging approach. The participants hear the whole story developed out of connecting the stories of each of the small groups and see the total picture as the clusters of meanings of each group are connected to those of the other groups. This process enables the participants to see and sense the higher level of consciousness that unfolds and emerges out of the outputs. This The activities involved in these four Hexagon phases of the sense-making were conducted as a starting point of a series of activities related managers to MOD students coming from several countries. common realization is referred to as a "C.I.A./K.G.B" Story and is experienced both at the individual and collective levels. This affirmation of connections thus creates a meaningful sense of "circles of community."

The activities involved in these four Hexagon phases f the sense-making were conducted as to an OD Intervention program designed for a larger and longer engagement. They were also used in a variety of activities and situations and with different types of participants in various countries. Table 2 below shows, the participants represent a very diverse group of people as the process tool was used over 15 years in various types of engagement that involved a whole array of individuals ranging from government officials and corporate

4. Research Methodology

The conduct of the action research in sessions involving the aforementioned four phases of "sense-making" approach required certain rules to be followed consistently so as to insure the generation of outputs as evidence of the connectivity in complexity (C/C). The following rules were thus applied:
- The key process question formulated to emulate responses from the participants always starts with "what matters" and the content question relates to the area of interest of the participants in the session.
- Participants are given the freedom to generate as many responses as they wish within a given time using the Hexagon"

technique. Their responses are then collected and randomly grouped according to the number of groups involved in a session.
- Participants working in heterogeneous grouping are free to cluster and compose their "sense making or meaning making" in a brainstorming process.
- Participants are to make their own themes or story lines as they see fit or appropriate and meaningful.
- Participants are to post their outputs for presentation and sharing in sequence as they complete their work on time.

Tables 3 and 4 above show a paired sample t-test that compares the level of understanding of the participants in terms of connectivity in complexity (C/C) before and after engaging in the OD using Hexagon. There is a statistical significant difference in the level of understanding before and after using the Hexagon process with a probability value of .000, which is lower than the significance level at 5%. In addition, since the mean of the level of understanding in terms of connectivity in complexity after using Hexagon shows a positive effect (1.0000 to 4.5026), it can be concluded that Hexagon has helped the participants develop a better understanding in terms of C/C.
- *Comparison of the Level of understanding in terms of C/C by Countries after Experiencing the Hexagon Proces*

The variance analysis above shows no statistical significant difference among the participating countries in terms of level of understanding in terms of C/C after experiencing
the Hexagon Process (.899>.05).
- *Comparison of the Level of Understanding in terms of C/C by Type of Activities after Experiencing the Hexagon Process*

As Table 6 indicates, there is no statistical significant different between each type of activities in terms of the level of understanding in terms of C/C after experiencing the Hexagon Process (.797>.05).
- *Comparison of the Level of Understanding in terms of C/C by Type of Participants after Experiencing the Hexagon Process*

5. Results and Findings of the Study

The results and findings of the study based on the hypothesis are shown in the following tables:

Table 3 - Paired Samples Statistics

	Mean	N	Std. Deviation	STD. Error Mean
Pair 1: Level of understanding before engaging in OD Program Level of understanding after engaging in OD Program	1.000 4.5026	193 193	.00000 .50129	.00000 .03608

Table 4 - Paired Samples Test

	Paired Differences					t	df	Sig (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Level of Understanding before engaging in OD Program – Level of understanding after engaging in OD Program	-3.6026	.60129	.03608	-3.6738	-3.4314	-97.068	192	.000

Table 5 - Post-OD Level of Understanding

	Sum of Squares	df	Mean Square	F	Sig.
Between Group	.565	6	.094	.367	.899
Among Groups	47.684	186	.256		
Total	48.249	192			

Table 6 - ANOVA – Post-OD Level of Understanding

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.980	7	.140	.548	.797
Among Groups	47.269	185	.256		
Total	48.249	192			

Table 7 - ANOVA - Post-OD Level of Understanding

	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	.880	6	.138	.542	.775
Among Groups	47.419	186			
Total	48.249	192	.255		

The analysis of the variances shows no statistical significant difference between each type of participants on the level of understanding in terms of C/C after experiencing the Hexagon Process (.775>.05).

Conclusion

Based on the statistics, it can be concluded that the Hexagon technique helped every participant and group develop a better understanding in terms of C/C regardless of the country involved or the type of participants or activities considered. Based on the statistical significant difference between and among the groups, the level of understanding in terms of C/C before and after experiencing the Hexagon Technique was positive. This significance points to an increased level of individual and collective consciousness.

Lastly, based on the outputs of those engaged in using this Hexagon technique for the purpose of C/C and "thinking through," it can be stated that there was a common thread from within every one when tapped as part of a collective process that linked all of them to one another as well as the whole group as one. This showed that their understanding and consciousness had risen to a level of "oneness or wholeness" and that, as a "thinking through" process, the Hexagon technique process, the Hexagen technique enabled everyone to experience "shared meanings."

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End notes

"C.I.A./K/G.B." is the metaphor of holistic/cross-cultural concept of the "whole human social systems potential" putting back-to-back the English/Pilipino terms for content/process - by Perla Rizalina M. Tayko

The use of the hexagons is a technique developed by IDON in Thinking with Hexagons. This was used by the GKA, Inc. in the FASTBREAK Session on Systems Thinking in Action during the 1995 Session held in San Francisco, Ca., USA, where Perla Rizalina M. Tayko first encountered the process.