QCC = ACTION LEARNING?

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Apart from their roles as veterans in quality management practices in particular in quality control circles (QCC), both Professor Koo and Professor Tao have been being believers and preachers of action learning for a number of years. They have advised and supervised many action learning researchers at master and doctoral levels in the Far East with the International Management Centres Association UK, the University of Action Learning, Colorado, USA, and the Asia International Open University (Macau).

Abstract:

Beyond doubts there have been a lot of similarities between quality control circles and action learning. Both have been around for a few decades and both are going strong and popular in various countries with different cultural practices and economic development stages. Are QCC and action learning really the same? Analogy can be drawn from caterpillar and butterfly. The genetic DNA is same but the two approaches are not identical in many other aspects. Their similarities and differences are compared and contrasted. More and more universities are adopting action learning as a powerful and effective method for business management, and organizations are using QCC to improve the staff and organizational effectiveness. Some companies even initiated corporate action learning institutes /universities and use action learning as a vehicle to become action learning organizations.

Key words: Quality circles, Action learning, action research, continuous improvement

What are QCC and Action Learning?

A typical QCC consists of members of a work group meeting regularly to identify and solve job-related problems. They first appeared in this format since 1962. Circle members receive relevant training provided by the employers whose senior management invariably retain the authority to approve or disapprove recommendation (Shea, 1986). The QCC program can provide both the opportunity to contribute and the skills and structure needed for more employees to work effectively in groups. With QCC, organizations benefits from developing organizational problem-solving ability, creating a sense of teamwork, and improving communication. This cooperative problem solving approach provides good opportunity for employees to learn more about their work and the work of the company as a whole. The circle members get the chance to learn about what it takes to make organization function. Kristensen et al. (1993) suggest that the main purpose for QCC activities is continuous improvement. It is important to have as many quality suggestions from the employees as possible. Geehr, et al. (1995) say that participation in quality circles can lead to experience work as more meaningful, result in greater knowledge of the results of their work, and lead to a greater sense of personal responsibility for the outcomes of work. These in turn lead to outcomes that include high internal work motivation, high-quality work performance, high satisfaction with work, positive work attitudes, and productivity-related outcomes, and low turnover and absenteeism.

Success of QCC is characterized bt the 1-3-5-7 elements. Literally, "1" implies "Totally enthusiastic", "3" refers to "synergy 1+1+1 >3", "5" means "Complementary skills – drawing the analogy that five fingers though of different lengths are complementary to each other", and "7" suggests "the use of 7 QCC Tools".

The concept of action learning was applied in education by Professor Reg Revans as early as 1945. As the action learning guru, Revans has never provided a single and comprehensive definition of action learning and at different times emphasized one aspect or omitted another (Mumford, 1995). The followings are some quotes from Revans reported by various experts:

"Action learning differs from normal training that its primary objective is to learn how to ask appropriate questions in conditions of risk, rather than to find the answers to questions that have already been precisely defined by others – and that do not allow for ambiguous responses because the examiners have all the approved answers" (Keys, 1994)

"Action learning is a means of development, intellectual, emotional or physical that requires its subject, through responsible involvement in some real, complex and stressful problem, to achieve intended change sufficient to improve his observable behaviour henceforth in the problem field" (Smith, 1997)

"But learning cannot be solely the acquisition of fresh programmed knowledge… Managers need also to improve their ability to search the unfamiliar, and inappropriate programmed knowledge may inhibit this… Action Learning is the Aristotelian manifestation of all managers' jobs: they learn as they manage, and they manage because they have learned – and go on learning" (Dilworth, 1996)

" … an approach to education that emphasizes the distinctions between doing things oneself and talking about things getting done by others in general" " …. to ensure that managers shall learn better to manage with and from one another in the course of tackling the very problems that it is their proper business to tackle; it has no truck with academic simulation of any kind" (Newton and Wilkinson, 1995)

Action learning is the process of reflection and action, aimed at improving effectiveness of action where learning is an important outcome (Bourner et al., 1996). It involves testing out ideas and then modifying the respective ideas as a consequence. Sandelands (1998) describes action learning as a form of learning by doing i.e. working on real problem, focusing on learning and implementing solutions. Action learning is concerned with making new ideas by placing them into natural experience, seeking to make meaning from experience (Raelin 1997). It is based on pedagogical notion that people learn more effectively in real-time problems in their own work setting. Action learning proposes that we learn best about work, at work and through work, within a structure which encourages learning (Peters, 1996). Action learning is about action: taking better future action by learning from current action. Members of large organizations often find themselves not being able to get to action after analysis and drive for results. Learning from action should be a way to become more action-oriented, not a way to do more analysis (Baird, 1999).

Limerick et al. (1994) cited Pedler's description of action learning as an approach to the development of people in organizations, which takes the task as the vehicle for learning. It is based on the premise that there is no learning without action and no sober and deliberate action without learning. It implies both self-development and organizational development. Harrison (1996) claims that action learning is a process of mutual learning within a small "set" of managers through questioning and reflection in order to produce action in the workplace and develop individual's learning ability. Mumford (1995) claims that action learning is holistic in its views of the person, the management process and learning. It is highly situational, flexibly treating elusive problems, and combines a social process with individual needs.

Action learning is a process that relies on learners being motivated to learn for themselves (O'Hara, 1997). Sandelands (1998) suggests that action learning is effective in set (group of colleagues who are comrades in adversity). Zuber-Skerritt (1995) claims that action learning promotes self-critical reflection and advice from critical friends (i.e. fellow set members). Action learning always works with "sets" which encourage executives to discuss, share, pool their ambitions and experiences thus creating a *Gestalt* where group synergy benefit can be reaped (Peters and Smith, 1996).

Mumford (1995) suggests the following important elements for effective action learning:
1. Learning should mean learning to take effective action
2. Learning to take effective action involves actually taking action not just recommending action
3. The action learning project must be significant to the learners themselves
4. Learners learn best from one another

Gibbons (1999) reports that action learning can be used to:
1. help fill the personal development needs of employees
2. explore issues that are important to the future organizational success
3. plant proponents and early adopters to achieve success and build critic mass

Howell (1994) compares the similarity between action learning and the andragogical model for adult learning in that the learner is self-directing, can make a valuable contribution from previous experience, and is motivated to learn in order to improve performance, self-esteem, recognition, quality of life, self-confidence, and self-actualization. He quotes the following definition of action learning as an approach to organizational change and development:

> Action learning is both a concept and a form of action which aims to enhance the capacities of people in everyday situations to investigate, understand and, if they wish, to change those situations in an ongoing fashion, with a minimum of external help. Action learning is concerned with empowering people in the sense that they become critically conscious of their values, assumptions, actions, interdependences, rights, and prerogatives so that they can act in a substantially rational way as active partners in producing their reality. Bowerman et al. (1999) remark that learning should not be done to people, it should be done with them and by them.

The barriers to action learning and QCC

Bourne et al. (1996) suggests that we can learn better through looking for the obstacles rather than basking in the successes. One common barrier to action learning is the perception by the employees that they have neither the time nor the inclination to be learners (Peters and Smith, 1996). O'Hara et al. (1997).claim that it is difficult to learn in action learning if the learner is unable or unwilling to take action   It is unlikely that action learning will flourish in an environment where the emphasis is on teaching rather than learning (Lawson et al., 1997).

The lack of support and facilitation from the employer is often a hindrance to effective action learning. Under such circumstance, the action learners often have difficulty in identifying appropriate action research topics, getting the necessary data form meaning analysis, implementing the solution and learn from the process. The lukewarm or indifference attitude from the superior on the action learning programme invariably results in selection of a less satisfactory action research topic with little positive impact on the concerned individual and the employing organization.

The barriers to QCC are rather similar to those of action learning, viz., lack of top management support, perceived lack of time, poor conducive environment to support QCC activities, and weak teamwork in the workplace.

The benefits of action learning and QCC

O'Hara et al. (1996) mentions the following benefits of action learning:
- Learning to learn (participants develop the capacity to be life-long learners)
- Self management of learning (autonomous responsibility to assess own & others' work)
- Self-awareness (being achieved through group interaction and reflection in set meetings)
- Learning with and through others (reinforcing the social aspects of learning)

Wills and Oliver (1996) claims that in addition to non-financial benefits of action learning 300+ managers triggered at least ten million GBP of investment to reap a ROI of fifty million GBP. The progress audit option (A+) introduced by International Management Centres Association (IMCA) has ensured greater success in the implementation of the action learning proposals. The A+ is a scheme introduced by International Management Centres Association/ University of Action Learning to encourage all graduates to write something about the process, result and additional learning experience on the implementation of the recommendation made in their research projects. This A plus scheme helps develop the habit and true spirit of action learning and to reap the benefits from the action of implementation.

The action learning approach provides a situation where the learners become de facto in-house "consultants" for their employers. The employers can benefit more from the action learning findings, which have stood the rigour of academic requirement on the one hand and have solved real problems in the organizations on the other hand. Unlike the case of employing external consultants who would not be around when they are needed after submission of their recommendation, the in-house action learners can take part in the implementation to ensure greater chance of successful implementation. The learners would also benefit from their pragmatic action learning project which in most cases should help them in their future career development. Action learning generates a true win-win situation.

Similar to action learning programmes, many organizations can reap economic benefits through recommendations made by the QCCs in many parts of the world. QCC is now used by both manufacturing and service industries to encourage teamwork, foster quality culture, enhance communication, share experiences, motivate continuous improvement, and develop staff potential. Apart from QCC presentation within the organization, many quality oriented companies

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participate in the local and international quality circles conventions to recognize the achievements of their outstanding teams. Such convention participations provide unique opportunities for the circle members to broaden their horizons and learn the contemporary quality management practices. Often the circles members become important ambassadors for their employers. Many organizations have used QCC as the springboard to launch other quality programmes e.g. business process re-engineering, 5-S, six sigma, ISO certification, balanced scorecard, TQM, benchmarking, action learning in-house degree programme (i.e. corporate learning institutes).

The learning equation

The most commonly cited learning equation (Beaty et al., 1997;Mumford, 1995; Chan, 1994: O'Neil, 1996; Keys, 1994; Smith, 1997; Chan and Anderson, 1994; Gregory, 1994) used in action learning is as below:
$L = P + Q$
where   L is learning
          P is programmed knowledge
          Q is questioning insight

Effective learning should depend on the appropriate mix of the P and Q which in turn is dependent on the A, S, and the E (Koo, 1999).   Where   A = the learning attitude of the learner concerned
                        S = the learning skill
                        E = the learning environment.

The learning attitude (A) embraces:
- the preference by the learner i.e. his personal inclination to P or Q.
- the learning discipline and determination for self-managed learning

The learning skill (S) covers:
- the ability to learning from each other in a team
- the capability to learning from reflection
- the effective use of technologies and tools (i.e. WWW, CD-Rom, electronic library; QQC 7 tools)
- the application of learning styles

The learning environment (E) involves:
- the support from the employer of the action learner
- the access to data and information required in the study
- the relevance of the action learning project

Action learning sets (teams)

Mumford (1996) enumerates the following process objectives for an action learning set:
- Assist each other to define the purposes, timescale and desired end results
- Assist other by testing and clarifying ideas
- Motivate each other to take action
- Share ideas on resolving difficulties encountered by others
- Offer information from own experience
- Monitor progress
- Manage themselves and review the effectiveness of that management
- Take charge of the individual and group learning
- Review and improve their learning

The above are equally applicable in quality circle environment. Teamwork and team-learning are invariably emphasized in the quality circle activities. The circle members assist one anther in tackling their mutual workplace problems, by sharing ideas and personal experiences. Where appropriate they implement their improvement

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recommendation and monitor the progress. More organizations are encouraging their QCCs to implement their recommendations.

In an action learning set, individual learner should identify their learning styles (i.e. Theorist, Activist, Reflector, Pragmatist) through the use of "learning styles questionnaire". It is possible to develop and build one's learning styles. Together as a set they should develop learning synergy. It is important to review not only how problems are tackled but also what they are learning from the process of undertaking these things. Each of them should maintain a learning log (Mumford ibid. prefers to call it Management Learning Diary).

The impact of technology on action learning and QCC

The rapid development of Internet offers learners convenient access to essentially unlimited sources of information. Learners become active agents in the process of learning and not passive recipients of knowledge from others.   IMCA has pioneered the use of Internet in creating a virtual university for learners from every corner in the world. All faculty members and course participants have access to e-mail and the World Wide Web for communication and information retrieval. Sandelands (1998) pointed out that a more appropriate supervisor could be located than otherwise. The following are common reference web sites for action learning:
http://www.imc.org.uk/imc/al-inter/
http://www.aiou.edu/eng/mms.htm
http://www.u-a-l.org/imcass/VUs/USA/frames.htm
http://www.scu.edu.au/schools/gcm/ar/arp/actlearn.html#a_al_al
http://www.it.bton.ac.uk/staff/rng/teaching/IS307/ALbookmarks.html
http://www.mcb.co.uk/imc/apc-1996/papers/ali-cat.htm
http://ericacve.org/docs/pab00009.htm
http://www.trainersnetwork.org/html/lrnaction.html
http://www.bsn.co.za/action_learning.htm
http://www.businessdecisions.com.au/strategies/actionlearning.html

Some useful web sites for QCC are listed here:
http://www.hkqma.org.hk/
http://www.ccqi.com/_disc3/0000001a.htm
http://www.mampu.gov.my/Circulars/DAC0791/DAC0791.htm
http://www.hk.ibm.com/news/040301_1.html
http://www.hkbu.edu.hk/~samho/tqmex/qcc.htm

The era of electronic publishing has greatly assisted self-managed learning. Wills (1996) defines electronic publishing as: "The exploitation of electronics in any and every cost-effective and cost-beneficial way that can facilitate the process of publishing". He further explains that *publishing* means: "Conceiving, creating, capturing, transforming, disseminating, archiving, searching and retrieving academic and professional knowledge and information". With these economic advantages for the publishers, the future trend will be proliferation of electronic publishing to meet the needs of researchers and business practitioners. Action learning can be greatly facilitated with this development. Access to needed knowledge will be faster, easier, more comprehensive, and hopefully cheaper as well. In future the QCC should be trained and encouraged to access these action learning sites. Learning through Internet offers an entirely new horizon with virtually unlimited boundary. Never before has learning been made so convenient, flexible, dynamic, exciting, and challenging. It would be useful if an internet based resource center can be developed to disseminate use QCC materials electronically.

The development of action learning and QCC in Hong Kong

Action learning has become more and more popular in recent years in Hong Kong. In addition to the various action learning degrees (up to doctoral level) offered by IMCA, other local and overseas universities are developing programmes or modules blended with action learning approach. As the employment market gets tougher and tougher, more and more people realize the importance of continuous self-development in order to keep abreast of the rapid

changes which they cannot ignore. Action learning is particularly pragmatic in applying what the learners have learnt. Unlike the traditional approach where learning success is measured by the amount of programmed knowledge acquired by the learners, the key objective of action learning is to generate something useful to both the learners and their sponsoring employers. It is likely that action learners will develop an inclination to adopt lifelong learning as advocated by the SAR government.

The universities and education institutes should critically review their curricula to see if there are more places for action learning. Perhaps a customer (i.e. the employers and students) survey would shed some light on the improvement requirements. The teaching faculty should receive training on action learning and / or QCC. The HKQMA (the non-profit making professional association established to promote QCC in Hong Kong) have been working closely with the universities in Hong Kong to preach the practice of QCC and action learning.

Since most manufacturing plants have moved to China, Hong Kong economy relies heavily on service industries. The training and promotion of QCC, should clearly reflect this phenomenon.

Comparison of action learning and QCC:

Despite the amazing similarities between QCC and action learning, little empirical researches have been conducted to compare the two popular and powerful learning and continuous improvement practices. From the forgoing discussions in various aspects, it is obvious that QCC and action learning do indeed have very similar genetic DNA despite the apparent appearance of a caterpillar and butterfly. Deep in the structure and root of existence, they are pretty identical. There are also obvious differences between them. There is a need to further investigate how QCC and action learning can be integrated to yield synergetic benefits.

Genetic DNA (true similarity) comparison between Action Learning and QCC

Action Learning	QCC
Success depends on Management support	Management support is essential
Work-based learning	Work-based problem solving
Learning being facilitated in team environment (sets)	Working and learning in circles
Questioning insight being emphasized	Fishbone diagram to explore 'why' problem occurred
Commitment to solving real problem	Enthusiastic to improve work condition
Career development	Staff potential development
Development of in-company consultants	Development of problem solver
Preparation of research project	Preparation of QCC recommendation
Learning by doing (implementation)	Learning by solving problem
Learning styles	Plan Do Check Action

Caterpillar and Butterfly (superficial difference) comparison between Action Learning and QCC

Action Learning	QCC
Participants personal time and effect are needed	Participation is part of work only
Can receive academic qualification	Get reward/recognition from employer only
Structured in line with university curriculum	Training on QCC normally provided by employer
Learning oriented	Problem solving oriented
Academic and pragmatic	Pragmatic
Develop a life long learning habit	May suspend when QCC activities end
Facilitation by experienced set advisors	Guided by in-company supervisors (e.g. facilitators)
More demanding on programmed knowledge	More emphasis on problem solving skills
Can be an individual work problem	Invariably working in a group/team
Learning equation: $L = P + Q$	7 QCC Tools

To conclude, although action learning and QCC are different superficially, they have a lot of striking similarities. More efforts should be made to link the two together to help improve the effectiveness of individuals and organizations. Can universities use the QCC and a learning platform and business organizations adopt action learning as a tool to develop their employees. Indeed there have been more corporate universities adopting the action learning approach. Perhaps an

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Action Learning Set can be used in business schools to get the best of both worlds from QCC and action learning. This is worth exploring. To match the 7 QCC Tools, the following 7 Learning elements can be promoted:

- Learning Style Questionnaire to facilitate team learning
- Learning Log to record learning process for reflection
- Learning equation: $L = P + Q$
- Learning with action (i.e. implementation of improvement recommendations)
- Learning to learn (lifelong learning)
- Learning with real workplace issues
- Learning with contemporary technologies (e.g. internet, electronic library)

The importance of linking learning and doing (i.e. action) can be best summarized by the following ancient quotes:

I hear and I forget
I see and I remember
I do and I understand
(Confucius)

What we have to learn to do, we learn by doing
(Aristotle)

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