Developing Quality Culture through Students' Quality Circles[1]
An innovative quality educational process initiated in Asia

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Sustainable prosperity – at global or organizational levels – is not possible without a mass of people who prescribe to standard norms, have shared ideas, exhibit behaviors and customs of supporting mutual happiness, peace and well-being. It is possible to create such a quality culture through proper nurturing of the people to inculcate quality mindset. However, this arduous task needs a long term strategic educational direction. Students' Quality Circles (SQC) – an adapted version of QCC (Quality Control Circles) principles – is used in academia to involve students at their early ages in collaboration, mutual learning, and developing positive skills in identifying, analyzing and solving recurring problems at home and schools. In this educational process SQC creates a learning environment for children to develop pro-social characters. It is a gradual process of making young children good and smart – turning them into total quality persons or TQP, in short. In the future, a collection of such a population creates a quality culture in the society and nation.

SQC was initiated in schools in Nepal since the beginning of this century. More than fifty thousand students and one thousand teachers from schools in various parts of the country have already participated in and are practicing SQC activities. These days, these young kids talk about collaboration, problem solving, quality tools, mutual support, and are engaged in communication and framing up of programs to form a quality culture in the society. These students – the future policy makers, executives, managers and workers in different fields – will become total quality persons possessing good as well as smart characters.

A two-dimensional model, TQP Character Grid is conceptualized to explain these two traits of a person. Moreover, a psychometric instrument for objectively measuring an individual's TQP Index with validity, reliability and practicality is also developed. The annual Mansha Memorial TQP Award (MM-TQP-A) has also been established in Nepal since 2015. Its objective is to motivate students to participate in SQC activities in their schools so that they develop citizens capable of creating quality culture in the community. This innovative educational process that has already gained remarkable grounds in various Asian countries, if introduced among students of early age, will positively develop their quality mindset and create a quality culture which are prerequisites to sustainable prosperity of any organization and the world.

Key words: *SQC (Students' Quality Circles), TQP (Total Quality Person), TQP Character Grid, TQPI scale*

BACKGROUND

Development, prosperity, sustainability and quality culture

The modern civilization, though five to ten thousand years old, believed in physical development for the prosperity of the citizens. Whether this kind of development really brings prosperity or not has always been a big question. Materialistic development has not brought mental peace and spiritual happiness to all civilization, and these days, this is apparently very remote from the reality. Today the so called smart people are gaining a lot in the name of knowledge enhancement, scientific and social research and accumulation of wealth. They can 'buy' prosperity with this wealth believing that they have everything good in their lives. What about most of the population that are not smart enough to build their own wealth and knowledge? Moreover, what about the physically, mentally and socially disadvantaged population and are not capable of creating prosperity? Who will look after them? Where are the good people? How do we create smart and good people so that the world will be an accumulation of persons collaborating for mutual prosperity? This is probably the answer to establishing sustainable prosperity in the civilization. Prosperity lies in the sense of physical world, mental ability and spiritual happiness.

The factories, mines, roads, airports, dams, atomic energy plants, hotels, hospitals, schools, and many other infrastructures are considered important agents of development and prosperity. Scientific, technological and managerial revolutions have created newer and smarter methods to continuously maintain development and prosperity of world population. It is the truth. May I go round to other side of the story? The anti-story. Lesser and lesser percentage of people are reaping the benefit from that kind of development, whereas more and more people are becoming weaker and weaker in the society. Thus, there we find prosperity only in fewer countries, fewer population but poverty prevalent among more people and in more countries. The social and economic divisions have created givers and takers like suppliers and customers. The carbon emission, global warming, social displacement, nuclear threats, health hazards, and increasing competition among people will be shaking the quest for sustainable prosperity much more in the coming years. So the question arises – is it possible to have sustainable prosperity? Yes, it is possible! It is possible if we can develop a quality culture among the citizens of the world.

Culture is nothing but a manifest of collective behaviours. It is a set of shared beliefs, attitudes, values, goals and practices that characterize an institution or a community or a country. And, quality culture is characterized by the collection of people who are not only smart but also possess good behaviour, attitude and character. They are smart, and they always strive for their development and prosperity. They are good in their heart; so they collaborate with their fellow citizens with empathy and service motive. The society with total quality persons then forms a quality culture compatible for sustainable prosperity. Can we create a quality culture – in other words, can we prepare a mass of total quality persons having smart and good behaviours? Again, the answer is, yes! It is possible through an innovative educational process called SQC which initiated from Asia and already applied and tested in Nepal.

STUDENTS' QUALITY CIRCLES (SQC)

An innovative quality educational process initiated in Asia

Quality culture requires an overall orientation of policy makers, administrators, scientists, professionals, managers, and workers towards understanding their customers and their needs, and continuously solves problems in a collaborative way to improve the process so that their

respective customers are enlightened. Such orientation depends on the values, beliefs and traits of every individual within whose minds these psychosocial scripts are written right from their early childhood – at home, at school and, later, at their working places. Quality people are those with commitment, positive outlook, leadership abilities and the desire to excel. The quality people are not created by chance, but through a constant and conscious effort to groom them. They have to be trained right from the beginning with quality consciousness as their second nature. Our academic institutions and schools have to adopt innovative ideas to respond to changing times. Their responsibility lies not only in imparting formal education but also in shaping the attitudes and personalities of their students. In institutions like these, empowerment programs like SQC have tremendous potential in molding children into total quality people, total quality citizens and total human beings.

Scripting new knowledge and skills on a clean board, that is, the mind of students is always easier and more effective than deskilling adults by erasing scripts deeply engraved in their minds since their early schooling period. The latter is not only difficult but, sometimes, even counter-productive. The slogan "catch them young" is functionally true and should be followed by all educationists to build the quality mindset of people.

Conceptualization and Development of Students' Quality Circles

Students' Quality Circle, popularly known as SQC is one such innovative process which can be understood simply as a collaborative learning among students with problem solving as a focal goal. SQC can be defined as follows.

> "A small team of students of same class who work in a team for continuous improvement by identifying their frequently recurring problems, analyzing their root causes and solving them permanently with the use of systematic and scientific approaches, tools and techniques leading to development of their pro-social personalities having collaborative and creative leadership traits".

SQC is an adapted version of Quality Control Circles (QCC) exercised in industries for continuous development. We call SQC the 3rd generation (3G) of QC Circle.

First Generation: Immediately after World War II, Dr. Edward Deming and Dr. Joseph Juran triggered scientists and engineers of Japan to move forward scientifically and collaboratively for continuous improvement in productivity, quality control and quality assurance. Under the leadership of Dr. Kaoru Ishikawa, Japanese engineers and scientists developed Quality Control Circle (QCC) and appropriate basic statistical QCC tools. This was in the early 1960s, and can be termed as the first generation of QC Circle which is considered as a part of Total Quality Control (TQC).

Second Generation: The economic development of Japan through the application of TQM and QC Circle strongly inspired Dr. Jagdish Gandhi at City Montessori School, Lucknow, India to initiate the QC Circle concept to his school for the first time in early 1990s. Dr. Vineeta Kamran, CMS Principal, with technical help from Mr. P.C. Bihari, a quality engineer, experimented with the concept of Student Quality Control Circle (SQCC) at her school. This was highly acclaimed by the international community of quality. The World Council for Total Quality and Excellence, a forum was then developed in 1999 with the participation of quality experts and educationists to promote the approach of Quality Control Circles in the academia all over the world. This can be termed as the 2nd generation of SQCC as a component of TQM.

Third Generation: Incorporating the concept of SQCC from India and the knowledge on QCC from Japan, Prof. Dinesh Chapagain experimented this in various schools in Nepal since 2000s with the support of many dedicated educationists and school principals though an institution

called QUEST-Nepal (Quality circles at schools for students' personality development in Nepal). Thus, SQC was initiated for the first time with the sole objective of preparing pro-social personality of students with the purpose of making them good and smart – actually making total quality person. This can be termed as the 3rd generation of SQC for preparing quality people for the future.

Distinctive features among QCC, SQCC and SQC

Some issues regarding the application of Students' Quality Circles in academia are quite interesting to rethink. QCC, SQCC and SQC are three versions which were gradually improved. The SQC is mainly for developing total quality person and quality culture in the society.

Quality assurance of institution for preparing total quality person: Establishing quality circles among students in educational institutes is not for providing assurance to the society on the quality of the institute, but to implant quality ingredients in the minds of students who are products of the respective educational institutes.

SQCC for personality development and not for problem solving: QC Circles in industries or other institutions are used for employee participation for problem solving with the motive of continuous improvement in process and products. The Students' Quality Circles solve their own problems in a team for their personality development and not meant to solve the educational institute's problems but to develop the personality of students.

SQC, not SQCC: Students do not control quality of any products, nor are the quality parameters of students controlled by anybody through SQC activities. Hence, the terminology Student Quality Control Circles (SQCC) is totally inappropriate and, thus, have named it as Students' Quality Circles (SQC).

Permanency of employees of QC Circle in industry and SQC in schools: Employees' quality circle members find their workplace in permanent homes for work, whereas students' quality circle members find their classrooms in a more or less temporary place to learn. Naturally, addressing of the problems will be completely different in scope.

Nature of problem for QCC versus SQC: Just as the purpose of QC exercise among the employees and students is different, the nature and scope of the problems also varies. The purpose of implanting Students' Quality Circles is to develop the personality and not just solving the problem. The nature of problems taken up by students will be very simple within the domain of their own and not going on the domain of teachers or other management staffs.

Problem solving tools for QCC and SCC: The seven basic and advanced QC tools are mostly used by QCC and SQCC, whereas the level of understanding of young students and the nature of problems SQC work for solving will not be helpful. The basic concept of tools are almost the same such as visual, simple to draw, which collaboratively can draw and understand in a group and infer the results by everyone immediately. SQC has identified newer tools and have rejected some of the traditional QC Circle tools as per their requirement.

Compulsory, not voluntary, participation of students in SQC: For employees of industries, participation in QC exercise or SQCC is voluntary, whereas participation in SQC should be made mandatory. The purpose and scope of QC among students is different from participation of employees in QC activities in industries. The main responsibility of an educational institute is to develop the character of its students. The educational institute should make it compulsory for all students to participate.

Schedule for students' QC meeting: In educational institutes, scheduling QC meetings for different groups is an arduous job. Students generally do not get free time during their study

periods. Educational institutes should schedule specific time for QC activities to enable all students to participate in QC activities.

Benefits from SQC

The personalities of students exercising SQC embody requisites of a total quality person, ones possessing good and smart characters.

Self-confidence: Students develop confidence in their knowledge, action and capability to deliver positive results even in difficult situations. This happens when a group of students in SQC solves their problems themselves without depending on others. Their confidence in analyzing the environment and service delivery starts to develop in their mindset.

Self-discipline: The self-discipline character attribute of commitment and honesty are developed when SQC members assemble every week at the same time for discussions and analysis.

Interpersonal relations: In the process of problem observation and implementation of the action plan to solve the problem, the students meet and interact with a number of other people besides their own team members, thus developing interpersonal relations skills.

Empathy: During discussions and brainstorming, Circle members always listen to others and give due importance to the views and opinions of others. While implementing countermeasures to solve problems, they also show understanding for other people with whom they have to work.

Social responsibility: At the time of identifying problems, the SQC members personally start exploring the problem keeping in sight the community's sensitivities and well-being. Thus, the students develop character attributes of social responsibility such as adaptability, tolerance and doing something good for the society.

Time management skills: SQC members have limited time to work. Each week, some ideas, analyses or conclusion have to be drawn within an hour. In addition, at least one problem has to be solved within a semester or a year. They develop skills in prioritizing activities, preparing action plans for analysis and implementing countermeasures within scheduled time.

Scientific and analytical skills: SQC activities involve collection of lot of data on the features of the problems and phenomena, and observation, analysis of causes and root causes. In doing so, the students utilize various problem solving tools and techniques. They develop the habit of working with facts and figures, and in the process, learn several qualitative and analytical tools.

Communication and presentation skills: Students who initially have difficulties in expressing their opinions in front of others develop confidence in communicating and sharing their views and opinions during brainstorming sessions. Besides, they also develop skills in presenting their cases in front of large audiences during the school seminars and conferences.

Creativity and lateral thinking habits: Students involved in SQC activities participate actively in several brainstorming sessions. The brainstorming exercises kindle the lateral thinking process among the students. This helps in developing the habit of thinking creatively and coming up with innovative ideas.

Habit of working in a team: Students realize the essence of group dynamics and the synergies created while working in teams. They understand how to work in a team effectively. As a team, they participate in identifying, analyzing and solving common problems.

Broader vision: Students involved in SQC acquire broad and in-depth knowledge of life and the surrounding environment. They are quick to acquire knowledge and skills prescribed in the

curriculum from their teachers in the class. They learn a lot in the process of sharing and interacting with their SQC team members, and also by observing the features of the problem.

SQC movement in Nepal

The development of Students' Quality Circle can be categorized into three stages.

(2000 ~ 2005) Learning and sharing stage: The first SQC was introduced on trial in Himalaya Vidya Mandir, Kathmandu with seven students. Every step was closely observed during the application of QCC and SQCC concepts, approaches, techniques and tools. This experience lead to the conceptualization of the first SQC. Based on this, many principals and teachers of schools of eastern Nepal, namely,Biratnagar, Urlabari and Dharan were given training on SQC. A number of school principals were inspired to attend the international student quality control circle (SQCC) conventions held in Mauritius, USA, Bangladesh and India. A number of joint seminars and training programs were organized in Kathmandu for teachers and students. All these were instrumental in developing awareness among large educational institutions, and understanding that quality circles among students support the development of their pro-social personality, not for solving problems of the institutions. Thus, the first National Convention on Students' Quality Circles, 2005 was organized by Kathmandu University High School in Kathmandu with the participation of more than 700 students and teachers. The convention resolved that SQC was an innovative tool to develop pro-social personality of students with good and smart characters. It also called for establishing a specific institution to cater to research and development for further promotion of SQC all over the country.

(2005 ~ 2012) Research and development stage: QUEST-Nepal (Quality Circles in Education for Students' Personality Development in Nepal) was established in 2006 by a group of forward looking and like-minded educationists as a non-governmental and not-for-profit organization, dedicated to research, development and promotion of SQC throughout the country. Many teachers and facilitators became interested to join hands voluntarily, and this trend still continues. The first book on the subject, "Guide to Students' Quality Circles: An Approach to Prepare Total Quality People" written by Prof. Dinesh Chapagain was widely circulated among Nepalese schools, and later in schools even in Bangladesh and Pakistan. Regular SQC facilitator training to teachers were held in different districts of the country. Discussions with government officials of the education sector were held and awareness program were conducted. The Master Trainers Laboratory was conceived in 2010 for senior SQC facilitators to conduct research and development activities on SQC for continuous improvement of its tools and techniques. Annual national conventions and SQC Master Trainers Laboratory programs have been continued. New tools and techniques suitable for SQC were thus developed.

(2012 onward) Organization development stage: In 2013, QUEST-Nepal developed an SQC curriculum for students of 6, 7and 8 classes with the support and coordination of curriculum development unit of Ministry of Education, Government of Nepal. SQC became an elective subjects school curriculum in the social behavior stream. A quality approach to develop quality people has been endorsed by many educationists. Many schools interested in SQC formed hubs for voluntary social networking in different parts of the country. These hubs supported self-motivated principals, teachers and facilitators to apply SQC and develop more and more quality people. The TQP character grid was developed, and an instrument has been established to objectively check the impact of SQC practices based on a TQP index. Since 2015, a national level Mansha Memorial TQP Award (MMTQPA) has been established to promote SQC in Nepalese schools. President of QUEST-Nepal represents as the Director-General in the World Council for Total Quality and Education board (WCTQEE) in India, a body that promotes SQCC (Student Quality Control Circles).
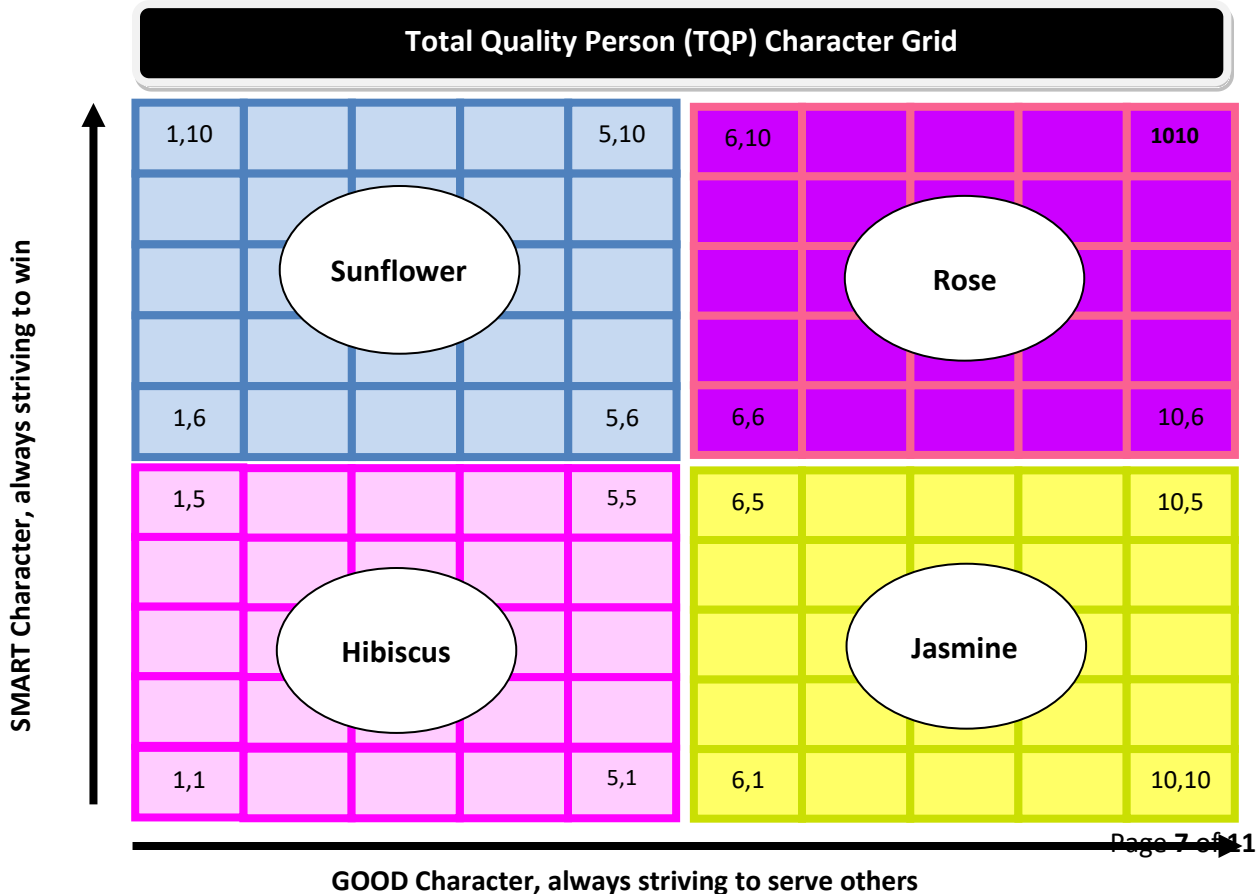
Current status of SQC in Nepal

- More than 50,000 students all over the country are participating in SQC activities.
- 1200 teachers certified as SQC facilitators are training students on SQC tools and techniques.
- 142 SQC Master Trainers are licensed to conduct research and development on SQC as well as to train more SQC facilitators.
- 12 annual national conventions on SQC organized in different parts of the country since 2005.
- One international convention on SQC held in 2010.Guidebook on SQC, school curriculum and course book on SQC for classes 6, 7 and 8, the SQC facilitators handbook, and many other resource materials are available for reference.
- An annual Mansha Memorial TQP Award was established in 2015 and two batches or 10 SQC students have already been awarded. **TOTAL QUALITY PERSON (TQP)**

TQP Character Grid, TQP Index and Measurement

Total Quality Person (TQP) Character Grid

If students at young age are involved in students' quality circles (SQC), they will develop the pro-social personality having good and smart characters. A person not nurtured with those two characters – good and smart at the same time, may not be a successful person in the society. In other words, such a person will be of less value to the society. A person with good and smart personality is a total quality person (TQP). Good and smart characters can be explained by a two-dimensional character model called the Total Quality Person (TQP) Character Grid.

Total Quality Person (TQP) Character Grid

SMART Character, always striving to win

1,10 ... 5,10	6,10 ... 1010	
Sunflower	**Rose**	
1,6 ... 5,6	6,6 ... 10,6	
1,5 ... 5,5	6,5 ... 10,5	
Hibiscus	**Jasmine**	
1,1 ... 5,1	6,1 ... 10,10	

GOOD Character, always striving to serve others

As shown above, the TQP Character Grid consists of one hundred (10x10) minor grids to position total quality person index (TQPI) of a person graphically. At one extreme, a person who has TQPI of 1x10 has excellent smart character but has minimum good character. In the other extreme, one who has a TQPI of 10x1 has excellent good character but minimum smart character. A person who has a TQPI of 10x10 has both excellent good as well as smart character, whereas, a person who has a TQPI of 1x1 has minimum in both good and small character. A person can thus be classified by his or her individual TQPI into four major types. We may symbolize these types with typical flower names. However, all flowers are beautiful, lovely and useful as human beings are.

People scoring low in both smart as well as good character scales: These people are represented by hibiscus, a beautiful but very sensitive and weak flower having no fragrance of its own. They are popularly known in Nepal as पलास फूल (*Palas Phool)*. TQPI of these people falls within the quadrant on grids in between 1x1, 1x5, 5x5, 5x1. These people, in general, need more coaching to enhance both their good and smart characters to make them a total quality person.

People scoring low in good but high in smart character scales: These people are represented by sunflower, a beautiful and strong flower available in varied colours but has no fragrance of its own. They are popularly known as सूर्यमुखी फूल (*suryamukhi*) in Nepal. TQPI of these people falls within the quadrant on grids in between 1x6, 1x10, 5x10 and 5x6. These people, in general, need more coaching to enhance their good character to make them a total quality person.

People scoring high in good but low in smart character scales: These people are represented by jasmine, a beautiful flower with excellent fragrance of its own especially at night time but is weak and small in size. They are popularly known as चमेली फूल (*Chameli)* in Nepal. TQPI of these people falls within the quadrant on grids in between 6x1, 6x5, 10x5 and 10x1. In general, these people need to be coached more to enhance their smart character to make them a total quality person.

People scoring high in both good as well smart character scales: These people are represented by garden rose, a beautiful and strong thorny flower in varied colors and has excellent fragrance of its own useful for decorations and worships. Popularly known as गुलाफको फूल (*Gulaph ko phool)* in Nepal. TQPI of these people falls within the quadrant on grids in between 6x6, 6x10, 10x6 and 10x10. In general, these people are self-motivated to enhance their smart and good characters to establish themselves as a total quality person possessing the TQPI of 10x10.

Objectively Measuring TQPI Scale

A valid and reliable objectively measuring psychometric instrument is constructed to identify the two-dimensional Total Quality Person Index (TQPI) of an individual. The measurement on that TQPI scale helps to position an individual on the TQP Character Grid. Based on that, an educational institute can identify the TQPI of individual students before and after their participation in SQC. This helps to identify the real benefits of SQC implementation objectively. When we talk about quality, standards and measurement are the basic instruments to check the quality. The TQP Character Grid is the standard and TQPI measuring psychometric instrument is a measuring scale to check the quality of SQC application. When SQC is applied in a school, this measuring instrument must be applied to check the result.

Two latent variables of the personality traits of TQPI, i.e., "Good" character and "Smart" character of an individual are each defined with five variables for constructing a concurrent TQPI scale. This is defined through a focus group discussion with SQC master trainers who are school

teachers and have working experience of SQC implementation in Nepal. All these variables are broken down into smaller units to understand each variable more clearly.

There are five sub-characters within **good character**: Believer of social and ethical values (respecting seniors, observing state rules and speaking truth), Committed and dedicated (working for quality, working selflessly, working for others), Pleasant looking (positive thinking, ever smiling, pleasing others with jokes), Compassionate (feeling others' pain, supporting others, listening others), Societal service (working voluntarily, servicing disadvantaged people and non-attachment with position and money)

There are five sub-characters within **smart character**: Self confidence (taking risks , discussing for rationality and hard working), Learning and sharing attitude (striving to learn new knowledge, reading books of different subjects and writing for others), Desire to excel (working extra than given responsibilities, striving for continuous improvement and working to get some returns), Desire to attract others (adopting new fashions, living neat and clean and striving to lead others), Desire to develop skills (working for self satisfaction, learning multiple skills and providing useful training).

A scale has validity if it properly represents the theoretical construct it is meant to measure. A scale has reliability (precision of measurement) if repeated measurements under the same circumstances tend to produce the same results. One such TQPI scale had been prepared statistically checking its validity, reliability and practicality. One web-based self-assessing application has also been prepared.

Mansha Memorial Total Quality Person Award

We have instituted the Mansha Memorial Total Quality Person Award (MMTQPA), an annual award in the memory of Mansha Sharma, to be awarded to students practicing students' quality circles (SQC). Five students progressing towards total quality persons will be selected for the award every year. The selection process constitutes of three stages involving different groups of people at every stage.

First stage (Institutional recommendation)**:** The institutional heads of schools participating in the national convention on SQC are asked to recommend for the award two students, preferably, one boy and one girl who have categorically demonstrated progressively good and smart characters as defined by QUEST-Nepal for becoming total quality person. The recommendation shall be received by the Award Governing Committee through QUEST-Nepal one month before the convention schedule.

Second Stage (Web-based objective self-assessment)**:** The Award Governing Committee will objectively measure the TQPI of all recommended students through web-based electronic media using scientific psychometric instruments and select top 10 students as finalists based on their scores in the test. This shall be organized on the first session of the first day of the convention. It may take about 30 minutes for the test. One computer for each recommended student with internet facility is required for the test, or alternatively, students can give the test through their own equipment.

Third Stage (Subjective assessment by juries): The finalists will appear on the stage for live performance for the final selection. This session will be scheduled in a panel in front of all students participating in the convention just before the closing ceremony. The selection process may take about 30 minutes. Selection shall be done by a team of five juries adhering to guidelines on two parameters of TQP like: Good (i) Social values and norms, (ii) Commitment and dedications, (iii) Pleasant looking, (iv) Caring and empathetic, and (v) Social work and Smart (1)

Self-confidence, (ii) Learning and sharing, (iii) Desire to excel, and (IV) Attractive, and (v) Desire to develop skills.

The five SQC graduates who were awarded the Mansha Memorial TQP Award at the 11th National Convention on Students' Quality Circles (NCSQC), 2015, Butwal were Arju Tamang (14 years/F) of Galaxy Public School, Kathmandu, Sumina Neupane (15 years/F) of St. Xavier's School, Lalitpur, Suman Shrestha (13 years/F) of Nawaratna English S. School, Bhaktapur, Nhujan Maharjan (14 years/ F) of Bright Future School, Kathmandu, and Bishesh Bhattarai (13 years/M) of Jhapa Model HS School, Jhapa.

Likewise, the five SQC graduates who were awarded the Mansha Memorial TQP Award at the 12th NCSQC, 2016, Bhaktapur were Prajjwal Dhungana (14 years/M), Nepal English Secondary Boarding School, Palpa, Prasant Bhattarai (15 years/M) of St. Xavier's School, Lalitpur, Rushil Nepal (15 years/M) of Mt. View English S School, Bhaktapur, Dhiraj Shrestha (15 years/M) of Nepal Police HS School, Kavre and Bibasta Poudel (14 years/F) of New Horizon HS School, Palpa.

It can be inferred that all flowers are beautiful and useful, and if all flowers in the world are of the same nature, size, colour, strength and fragrance, this world would have been a dull and boring place to live in. Since people in this world have different characters and personalities, we live here happily. There are people who score high in "good" character, and there are also people who score low in it. However, both these types of people are beautiful as well as useful. Similarly, there are people who score high in "smart" character, and there are also people who score low in it. Yet both are beautiful as well as useful. Nature has created such variations. SQC just helps to boost both the characters and develop total quality person.

CONCLUSION

Students' Quality Circles (SQC) is an innovative quality educational process which may be considered as the third generation adapted version of Quality Control Circle (QC Circle) initiated and promoted in Japan with an objective of solving quality and productivity problems in manufacturing and service industries. The second objective of QC Circle has been to develop mutual respect for humanity. This QC Circle has been applied among students of young age by CMS Lucknow, India, and is called Student Quality Control Circle (SQCC). It's objective is to make them aware of quality tools and techniques and realize the slogan of "Catch Them Young". SQCC may be considered as the second generation of QCC. The message of SQCC has been spread to as many as 34 countries including USA, UK, Mauritius, Turkey, Pakistan, Bangladesh, Sri Lanka and Nepal. SQCC is just transferring the application of QCC of industries to students at educational institutes.

In Nepal, SQCC has been further refined to adapt at schools, and is referred to as SQC. QUEST-Nepal (Quality circles in education for students' personality development in Nepal) has been established to conduct activities related to research and development, training, awareness programs and applications of the approach, tools and techniques of solving problems of the students by the students for the students. In the process, they develop their pro-social personalities for possessing 'good' and 'smart' characters. It has been widely accepted by many educational institutes in Nepal, and has resulted in very positive impacts in the community. The TQP character grid and TQPI measuring scale are helpful to measure the impact of SQC application at the schools. QUEST-Nepal is also monitoring the results by establishing MMTQP award annually. The acceptance of this innovative process can also be gauged by its expansion in many

schools and students and the formation of voluntary and self-regulatory hubs in different parts of the country.

A person having 'good' and 'smart' characters is said to be a total quality person. Collection of mass of total quality persons will create quality culture in an institution, community and the whole country. The current parameters of development alone have not brought prosperity in any society. Prosperity comes when all round development in physical, mind, heart and soul are aligned in one line. A smart person without having goodness in his or her character has created competitions all over. This competition may have helped the individual to look at lopsided development and has spoiled the world. Collaborate with others and compete with yourself is the keyword.

Students' Quality Circle (SQC), if practiced from the very young age at schools enables students to collaboratively learn to identify their own psychosocial problems, learn of their difficulties, phobias etc. and analyze their root causes systematically and scientifically using appropriate approaches, SQC tools and techniques and solve them on their own. That way, their personality shines with both good and smart characters. They will be part of the quality culture which will go a long way towards developing sustainable prosperity in the world.

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