# THE IMPLEMENTATION OF A QUALITY CARE SYSTEM IN A DUTCH SCHOOL FOR SECONDARY EDUCATION

**by**

**ANNA NGAR-KI LEUNG**

**B.A. (HONS.), The Hong Kong Polytechnic University, 2003**

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**ABSTRACT**

The quality of education has grown into one of the most important aspects of the Dutch education, as loads of effort and money have been put into the education in the Netherlands from time to time. Dutch schools are strongly encouraged, by the Dutch Education Inspectorate, to have their own quality assurance system. Q5 is one of the organizations that provides help and guidance to Dutch secondary schools in the implementation and development of their own quality assurance system.

This research study aims at finding out the four necessary implementation components for a quality care system, based on the ABC framework introduced by Q5, and the development of each component from the beginning to the ideal stage, and nailing down the un/favourable factors that influence the development of the quality care system. Twents Carmel College (TCC) is the target school to be researched into in this research, for the development of research instruments and analysis of the quality system, because it was one of the pilot schools of the ABC project and has adopted the ABC framework in its quality system. Four of the five locations are to be researched into and one for pilot.

An Innovation Configuration Index is developed, where four necessary implementation components and their stages of development are identified and elaborated, for the examination of the quality care system. An interview guide is drawn up for the interviews to find out the four locations' position on the Checklist. The four locations have gained an average of good in all the components on the Index with little deviations. A conclusion is drawn to provide suggestions to the TCC in the development of their quality system, and to give recommendations to TCC, other schools and Q5 for the future use and improvement of the IC Checklist.

**Table of Contents**


**CHAPTER 1 INTRODUCTION ..... 1**

**1.1 Purpose of the Study ..... 1**

**1.2 Twents Carmel College ..... 2**

**1.3 Research Questions ..... 3**

**1.4 Research Framework ..... 4**

**1.5 Arrangement of the Thesis ..... 4**

**CHAPTER 2 REVIEW OF THE LITERATURE ..... 6**

**2.1 Quality Care in Schools ..... 6**
2.1.1 Quality Care System ..... 6
2.1.2 School Self-Evaluation ..... 8

**2.2 School Changes and Development ..... 10**

**2.3 The Concerns-Based Adoption Model (CBAM) ..... 12**
2.3.1 Innovation Configurations (ICs) ..... 12

**CHAPTER 3 RESEARCH METHODOLOGY ..... 14**

**3.1 IC Checklist ..... 14**
3.1.1 Development of the Checklist ..... 14
3.1.2 Validation of the Checklist ..... 14

**3.2 Data Collection ..... 15**

**3.3 Data Analysis ..... 16**

**CHAPTER 4 RESULTS ..... 19**

**4.1 Instrument Development ..... 19**
4.1.1 IC Checklist ..... 19
4.1.2 Interview Guide ..... 27

**4.2 Summary of Interviews ..... 28**

**4.3 Positions on the IC Checklist ..... 48**

**CHAPTER 5 DISCUSSIONS ..... 52**

**5.1 Scope of the Study ..... 52**
5.1.1 Data Limitations ..... 52
5.1.2 Other Limitations ..... 53

**5.2 Factors in the Development of Quality Care System ..... 54**
5.2.1 Favourable Factors ..... 54
5.2.2 Unfavourable Factors ..... 55

**CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS ..... 57**

**6.1 Suggestions to TCC .....57**

**6.2 Recommendations for Future Use and Development of the IC Checklist .....58**

**6.3 Improvement in the Research.....59**

**LITERATURE BIBLIOGRAPHY ..... 61**

# CHAPTER 1 INTRODUCTION

## 1.1 Purpose of the Study

Huge amount of money is invested in education every year and hence parents and the public demand more school accountability, quality has been at the centre of debates about education in the world. Quality of education has been a hot topic in the Netherlands, and such concern has been highlighted and reinforced by the Dutch laws concerning the quality policy, the "Quality Act" in 1998. Schools themselves are responsible for their own education quality and have to develop their own system of quality assurance. The educational legalization, furthermore, stipulates that each school has to be assessed and evaluated by the Education Inspectorate regularly. Dutch schools will therefore receive a periodical judgment of their education quality, drawn up by the Education Inspectorate.

As taxpayers are eager to know if their money is well spent on education while schools are eager to develop and improve, quality care brings together these two distinct features of work in education – school accountability and improvement (Cuttance, 1993). Quality care in education is composed of internal and external quality care. The process of internal quality care is carried out by the school, while that of external quality care by outsiders of the school, like inspectors. Though schools have become more autonomous and have internal quality care themselves, external quality care carried out by outsiders is necessary to help schools be not biased (Karstanje, 2000). School self evaluation is one of the most popular means of internal quality care in education.

A national quality assurance project for secondary education, Q5, was initiated in the Netherlands in 2000. The aims of Q5 include stimulating schools to develop a quality management system, bringing about a balanced relationship between school-based quality assurance and school inspection, supporting quality assurance networks and projects, and developing tools for quality assurance. One of Q5's famous projects is the ABC project, which has introduced a 3-step quality assurance system. The school first carries out its own self-evaluation and produce a report (Report A). The school is then visited by its critical friends, based on the subjects mentioned in the Report A, and is given a report (Report B) with the findings and feedbacks. Lastly, the Education Inspectorate carries out a periodical inspection, based on both the Reports A and B, of the school and draws up a report (Report C).

The ABC project was proved to be a success after being implemented in five pilot schools from 2001 to 2003. According to the pilot project, Q5 has then developed sample models and sets of instruments to assist schools which want to implement or continue such a quality assurance system. Though the ABC project was proved to be a huge success and the ABC framework has surely come handy for schools, the development and implementation of the 3-step quality assurance system is still at an embryonic stage in different secondary schools. There is some concern and trepidation in schools about the quality of their implementation of the quality system. The school management and staff are also concerned about what they should do to help the development of the innovation.

As the ABC framework becomes increasingly popular, more schools have adopted and are implementing the model in their own school system. To help school assess what kind of actions, relating to the implementation of the ABC framework, have already taken place and ensure that the actions have fallen within acceptable limits to achieve the desired result, schools which have adopted the ABC model are chosen to be the targets of this research project. The major aim of this research project is to find out the necessary components required for the implementation of the quality system, based on the framework of the ABC project, in secondary schools. Necessary implementation components are primary features of the quality system, or important aspects needed in implementing the quality system in schools. It is believed that the success of the development of the implementation components in schools is directly related to the success of the development of the schools' own quality system.

As individuals react differently in each component according to the stage of development, the variations of each component are carefully found out in this research to help a better understanding of the development of the implementation components in respect of reactions of individuals involved. Another aim of this research project is to produce an instrument to show the stages of development of a school quality system, according to the stages of development of certain implementation components. The instrument would act as a tool for school managers to find out the individuals' behaviours towards the implementation components, and to identify the developmental stage of each component. The instrument is also a tool to help individual users find out themselves the stage of development of each component of the quality system and the necessary actions required for further development. Since quality system is a quite unclear concept to the users, it is necessary to translate the development of a quality system, according to the necessary implementation components, into working terms to help individuals understand the idea better in order to make full use of the system.

This research project also aims at finding out the favourable and unfavourable factors that would affect the implementation and development of a school quality care system. The findings would act as a mirror to other schools, which have implemented a similar kind of quality system, and help them develop their quality system better, as the schools could try to encourage the favourable factors and avoid the unfavourable ones.

### 1.2 Twents Carmel College

This research study is carried out in the Twents Carmel College (TCC), through face-to-face discussions and phone interviews with different members of TCC. Twents Carmel College is an education organization for secondary education which serves a population of more than 4500 students in the region of Twente with five main school locations – Lyceumstraat, Potskampstraat, De Thij, Losser, Denekamp. Students who have finished their primary education would first start with a two-year basic curriculum at the locations of Denekamp, Losser, De Thij or Lyceumstraat. At the end of the second school year, the students would be recommended, according to their ability and interest, to continue their education by following a particular track.

Students who are recommended to attend prevocational secondary education (VMBO) would attend school at the locations of Potskampstraat or Losser, students to higher general secondary education (HAVO) or pre-university education (VWO) at De Thij or Lyceumstraat, students to practical training programs (PrO) and learning support departments (LWOO) at Potskampstraat. Though the five locations are interrelated to each other, each of them has a different school culture due to the feature of decentralization in the TCC. Each location has a location director, who is responsible for overseeing the several departments of the location. Each department is composed of a head of department and around 20 teachers. The mentioned information of the five school locations of TCC is shown in Table 1.

| **Twents Carmel College (TCC)** | | | | | |
|---|---|---|---|---|---|
| School Location | Lyceumstraat | De Thij | Potskampstraat | Denekamp | Losser |
| Type of Education | HAVO<br>VWO | HAVO<br>VWO | VMBO<br>PrO<br>LWOO | MAVO | VMBO |
| Number of Personnel (LD: Location Director; HD: Head of Department; T: Teachers) | LD: 1<br>HD: 5<br>T: 106 | LD: 1<br>HD: 4<br>T: 93 | LD: 1<br>HD: 5<br>T: 120 | LD: 1<br>HD: 1<br>T: 25 | LD: 1<br>HD: 2<br>T: 45 |

| | | | | | |
|---|---|---|---|---|---|
| Number of Students (in 1998) | 1535 | 1317 | 990 | 156 | 354 |

Table 1 *Structure of Twents Carmel College*

Twents Carmel College participated in the ABC project of Q5 in 2001 and became one of the five pilot schools, which adopted the ABC framework and INK Management Model in one of its school locations, De Thij. The INK Management Model identifies nine mutually linked areas in organization and result for special attention, and groups the nine areas into five stages of development to form a cyclic process of improvement and renewal. After the success of the pilot program, TCC has expanded the use of such a quality system from only one school location to all five locations.

On top of the instruments that has been used since the pilot program, TCC has implemented and used the 360-degree feedback questionnaires, a new means of data collection which helps personnel evaluate their work and performance by receiving feedbacks from their leaders, co-workers and students, in all school locations since October 2002. The 360-degree feedback questionnaires are regarded as an instrument to assist personnel development in the TCC's Integrated Personnel Development Policy (IPB-protocol). TCC aims at using the quality care system to collect information for the departments of the school locations so they would have a constant view of what others think of what they are doing and what others need, so departments could use the information for making plans in the future.

TCC counts on the wide variety of questionnaires, designed by a developer who was particularly employed for designing and developing the questionnaires of TCC, to collect information from the different stakeholders about the school for the part of self-evaluation in the ABC framework. There are mainly three types of questionnaires designed for students, parents and teachers, for primary and tertiary schools, and for alumni. The questionnaires to students, parents and teachers aim at collecting information about their comments on the current educational matters and their suggestions for improvement. Questionnaires to primary schools are designed to collect information about the students TCC should be expecting, and tertiary schools about the schools' expectations of students from TCC. Alumni are asked for their comments on TCC in their questionnaire, for example, what have TCC done that benefits them the most and what should TCC have done to help them better.

All questionnaires have to be filled in with computers, so the computer program could produce and compare results in different desired selections or groups. Each questionnaire is composed of 60 multiple-choice questions and three open questions, but additional questions could be added on request. The developer is responsible for designing questionnaires, collecting completed questionnaires, summarizing results and producing detailed reports. Reports, in which results of different departments are compared, would then be distributed to school managers, teaching staff, and parents.

### 1.3 Research Questions

This research-based thesis aims at answering the following questions –

(1) What are the components needed for schools to implement the quality system based on the ABC framework?
   a. What are the variations of each component?
   b. How are the variations categorized into different stages of development?

(2) How is the quality care system implemented in schools?
   a. What are the similarities and differences in the implementation among the schools?

The Innovation Configurations (ICs) of the Concern-Based Adoption Model (CBAM) is used in this research project, as it deals directly with the components required to build an innovation and shows

what persons would do at which stage of the innovation. The Innovation Configuration Checklist (IC Checklist) is developed in this project to list out clearly the innovation components, actions and behaviours of individuals involved, and the different stages of development of the innovation.

The school locations gain a position on the Checklist according to their stage of development in each implementation component. The results are then compared and analysed to find out some favourable and unfavourable factors that influence the development of the quality care system in schools. Recommendations are made to schools, which implement similar kind of quality care system, about the development of the quality care system, and suggestions made to researchers about the improvement of the research instrument, the IC Checklist.

### 1.4 Research Framework

The implementation of a quality care system in secondary schools is researched into by first finding out the essential components for the implementation. Four implementation components are nailed down, in order to be examined thoroughly within the limited amount of time. Each implementation component is elaborated and its relating variations, included the changes in behaviors and thoughts of individuals, are found out. The variations are arranged in the order from the beginning to ideal stage, and the stages are carefully grouped into different stages of development.

All the mentioned elements are gathered to draw up an Innovation Configuration Checklist, which shows clearly the variations of each component included in each stage of development. The Checklist is used to examine and compared among the school locations, in order to first find out their positions on the Checklist and then to identify factors that influence, positively and negatively, the development of the quality care system in schools. The research framework is shown in Figure 1.

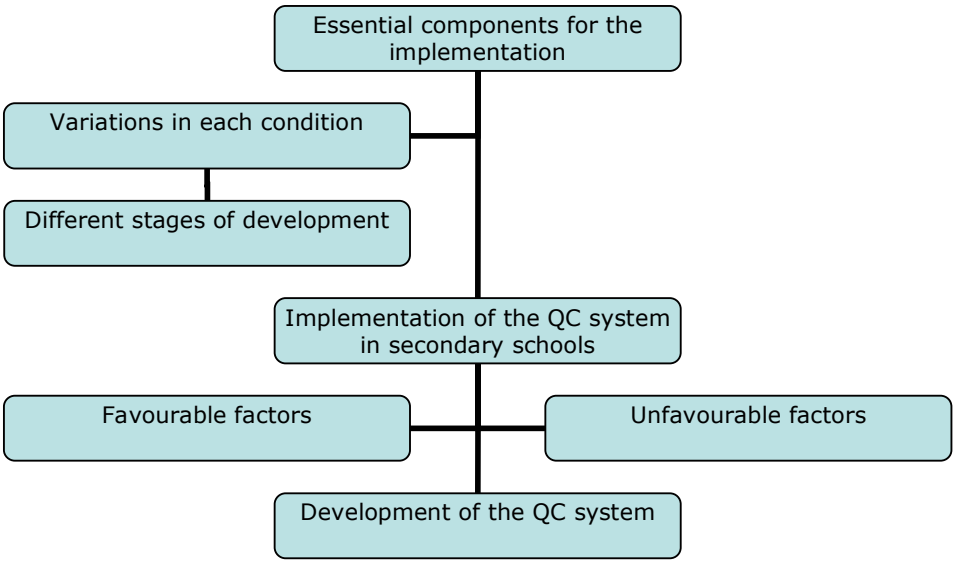


Figure 1 *Research framework*

### 1.5 Arrangement of the Thesis

This thesis starts with the reviews of literature related to quality care in education, which includes the use of quality care system in schools and in Dutch secondary education, and school self evaluation. Literature about school change and development reviewed to find out the common trend of changes schools undergo during innovation. The Concerns-based Adoption Model (CBAM) is explained in detail, especially the Innovation Configurations (ICs) and the Innovation Configuration Checklist (IC Checklist), through the literature review.

The research methodology of this thesis is addressed following the literature review. The development of the research instruments, the IC Index and interview guide, is described thoroughly. The IC Index is drawn up step by step, from shaping up the implementation components to nailing down the finalized Index, with help from different educational experts. The pilot of instruments is described and the adjustments of the instruments are explained. The scope of this thesis is addressed in two major aspects – data and other limitations. This chapter lastly included the descriptions and explanations of the methods of data collection and analysis.

Results of the research are shown, with a summary of the interviews carried out and an overall summary of the position of each school on the IC Index. The results are then analysed to find out the favourable and unfavourable factors that influence the development of the quality care system in schools. Suggestions and recommendations are produced in the last part of this thesis, to schools in the better development of their quality care system and to researchers or schools in the future use and improvement of the IC Index respectively.

# CHAPTER 2 REVIEW OF THE LITERATURE

## 2.1 Quality Care in Schools

Quality has been at the centre of debates about education in different countries because huge amount of money is invested in education every year and therefore there is an increased accountability demands for parents and the society. School quality care has therefore become more important in many countries. A general definition of quality care is "*the total of activities in a school oriented toward systematic control and improvement of the quality of the school*" (Karstanje, 2000, p3). Some of the crucial aims of school quality care are to improve the change capacity of schools to provide a better environment for developing effective practice, to ensure that education outcomes are provided to the varied educational needs, and to provide a foundation for reviewing the effectiveness of practice within and across schools (Cuttance, 1993). Therefore, the means of school quality care should be developed and used to reach such aims in improving educational practice, fulfilling stakeholders' needs, and allowing reviews.

### 2.1.1 Quality Care System

Quality objectives in secondary education should be identified after consultation with three major user groups – students, future employers, and society – about their aims and values. The achievement of the quality objectives should be examined on four main dimensions: input, process, output and effect (Nielsen, Visser, van Beers, Boorild & van Seters, 1997). The followings are the brief explanations of the four dimensions:

| | |
|---|---|
| Input: | qualifications and motivation of students; school resources |
| Process: | the content of the course; the process of teaching and learning; the learning environment; the administration and management of the school |
| Output: | results of examinations; alumni's competences; drop-out rates |
| Effect: | competitiveness of students; employment |

The initial work on quality was largely about review and evaluation, and if we are to succeed with the work, it will have to involve, not only the above four dimensions, but also all the stakeholders, who are both directly and indirectly associated with the school. The followings are some more essential components of implementing and maintaining a quality care system in education: (Cuttance, 1993; Sallis, 1994)

1. There must be clear and shared goals of teaching and learning.
2. The goals must be translated into a strategic school development plan, as a means of addressing the quality of teaching and learning.
3. The school development plan must be implemented with working documents, which indicate clearly when should what be done by whom.
4. There must be means of monitoring the implementation and effectiveness of the school development plan.
5. Interactive feedback must be provided.
6. The school quality care must be a process of continuous improvement and development.
7. There must be a whole-school approach to quality care.
8. Staffs at all levels must take an active role in implementing and improving school quality care.
9. There must be a means of determining the needs and wants of students and external agencies.
10. The quality care must be based on strong leadership.

In some countries where education is characterized as highly centralized and the government provide strict rules and detailed guidelines, the quality of education can easily be defined as good when schools follow exactly the provided rules and guidelines. Such a means of quality care is becoming less popular and is now gradually replaced by a new system that locates the responsibility for quality

care at the school itself, as a result of decentralization in education in many countries, such as the Netherlands. Since the views on education is constantly changing and the state-regulated education is not able to keep pace with it, the Dutch government has adopted a new approach to provide schools with more autonomy, in a hope that the increased flexibility would help schools adapt to the ever-changing needs of the society. Since August 1998, the Dutch "Quality Law" prescribes that schools are responsible for the quality of education they provide and for developing policies that ensure improvement. All Dutch schools are strongly encouraged to develop its own quality assurance system.

The Law on the Supervision of Education, which came into effect in September 2002, ensures that Dutch schools are given more autonomy and responsibilities for their own quality, while the quality of education provided by the schools is guaranteed and continuous improvement is stimulated by external inspection of the Inspectorate of Education. Both internal and external quality assurance is important in Dutch education. Internal quality assurance is a range of activities carried out by the school itself with the aim of quality assurance and improvement, while external quality assurance are activities carried out by outsiders with a view to guaranteeing the quality of education (Nielsen et al., 1997).

The presence of a system of internal quality care does not imply that external quality care is unnecessary. Schools need an external agency to help them especially in preventing to be biased and unrealistic. The two most commonly used external agents in Dutch secondary education are a visitation committee and the Inspectorate of Education. The role of a visitation committee is to help schools be more critical in their internal quality assurance by providing schools with an evaluation from a different perspective. The role of inspectors is not to assist schools in their internal quality assurance, but to ensure every important aspect of schools is examined and evaluated.

The work of the visitation committee is to entail regular visits to schools once four years, to recognize and reflect on the goals formulated by the schools, to act as a 'critical mirror' for the schools, and to give recommendations for improvement (Karstanje, 2000). The main job of the inspectorate has changed from controlling the regulations towards evaluating whether the internal and external evaluation reaches the goals formulated for such evaluations. According to the Law on Inspection, one of the crucial aspects is to keep the evaluations in proportion. The inspectorate will carry out only a quick scan in principle to check the reliability of the evaluations carried out by the school and its critical friends, which is the desired outcome of the ABC project. Though the Inspectorate can simply adopt the reports if the quick scan is enough, this has not yet happened as most Dutch schools are still not experienced and sophisticated enough to develop a self-evaluation that is thorough and reliable enough (Van Bruggen, 2003).

The Inspectorate of Education works closely with Q5, a national quality assurance project initiated for Dutch secondary education since January 2000, to bring about a balanced relationship between school-based quality assurance and general school inspection. The major goals of Q5 are to stimulate schools to develop its own quality system, to involve stakeholders inside and outside schools, to present self evaluation results to third parties, to participate in networks of school quality care, and to publish information about their own quality. Q5 suggests five basic questions as a start for quality assurance (Tjio, 2005):

1. Is the school doing the right things?
2. Is the school doing things right?
3. How does the school know?
4. Do other parties agree?
5. How can the school improve?

Q5 is promoting quality assurance in Dutch secondary schools, as it believes that quality assurance could bring about school improvement, accountability and transparency regarding quality. Q5 has been carrying out different activities to achieve its goals. It provides schools with clear and accessible information about quality assurance with brochures, websites and conferences. It carries out regular consultations with schools and parties involved in quality assurance in Dutch secondary education, to

monitor the implementation of quality assurance in the schools and to stimulate the development of tools for quality assurance. Q5 has been supporting networks, training programs and pilot projects of quality assurance. One of the famous pilot projects is the ABC project, which suggests the quality assurance to be composed of three main parts – school self-evaluation, feedback from critical friends, and evaluation by the Inspectorate. Twents Carmel College is one of the school organizations which has adopted the ABC framework in its school system. The above three parts – school self-evaluation, feedback from critical friends, and external inspection – have formed the quality care system in the TCC, in which the school self-evaluation is one of the means that shape the quality care system. Only the part of school self-evaluation in TCC, by means of a wide variety of questionnaires, would be researched into in this thesis.

### 2.1.2 School Self-Evaluation

School self-evaluation is one of the commonly used internal quality assurance process, and is seen as a crucial element to continuous development. The primary goal of school self-evaluation is school improvement, which is composed of two major directions – improvement in teaching and learning (Kyriakides & Campbell, 2004; Saunders, 1999) and improvement in school organization (Kyriakides & Campbell, 2004). As school self-evaluation and quality care system share similar goals, school individuals and researchers may sometimes be confused and mixed them up. It is important to distinguish between school self-evaluation and school quality care system.

Deming's PDCA (Plan-Do-Check-Act) cycle is used to further explain the difference and relationship between school self-evaluation and school quality care system. PDCA is a repetitive cycle designed to facilitate incremental continual improvement through change, and included the specific steps – plan an event, implement the event, check the results of the actions taken for the event, and act on what is learned. A quality care system is the PDCA cycle that keeps improvement and development going, while the school self-evaluation is a means used in the "Check" part of the cycle that evaluates on what has been done.

Three of the basic functions of school self-evaluation in schools are – political, accountability, and professional development (Kyriakides & Campbell, 2004). The political function of school self-evaluation is to show the spread of democracy in the school and to make visible how the school works, as different school stakeholders are involved in the evaluation process. School self-evaluation is therefore regarded as a result of the revolutions in school autonomy (OECD, as cited in Kyriakides & Campbell, 2004). Another function of school self-evaluation is to be accountable to school stakeholders and the public, as the school has to provide stakeholders with evidence on its education and performance. The school self-evaluation lastly serves a professional development function, because school self-evaluation gives better insights into the current situation which initiate schools to respond to the needs and hence to further develop (Meuret & Morlaix, as cited in Kyriakides & Campbell, 2004).

The school self-evaluation is used in TCC to serve the three basic purposes mentioned. As TCC has been actively promoting the maintenance of five autonomous school locations in the region of Twente, the school self-evaluation is used to boost the democracy and transparency in TCC. Twents Carmel College has insisted in developing in the way the government acts, so it aims at using school self-evaluation to make the school locations accountable to parents and the community, by involving parents and the community in the process of school self-evaluation and reporting results to them. As mentioned earlier, TCC has implemented the 360-degree feedback system in its school self-evaluation system to promote professional development to their staff.

A good school self-evaluation not only serves the above purposes, but also saves the work of the Education Inspectorate in performing external evaluation. School self-evaluation is one of the means of internal school quality care, which would first be reviewed by the Education Inspectorate in order to decide if extra evaluation is needed. It is believed that the better the quality of school self evaluation,

the less the school would be bothered by the external inspection (Van Bruggen, 2003). In the Law on the Supervision of Education, a school self-evaluation is defined as good when:

- it is complete
- it is reliable
- it shows enough ambition in its evaluation of the facts

The school self-evaluation is complete when it has covered all or most of the important aspects for quality, is reliable when all the information reflects the real situation and is not biased, and shows ambition when it aims at and is carried out for making a difference. There are also some general characteristics of a successful school self-evaluation described in literature about school self-evaluation. A good, successful school self-evaluation should (Hopkins, 1989; Tjio, 2005):

- aim at collecting information about the condition, purposes and achievements of the school.
- aim at school improvement and development, and achieves to be an autonomous school.
- be carried out by the school, and its results should belong only to the school.
- be a total of activities that involves everyone in the school.
- be composed of a systematic review and evaluation process.
- lead to actions on activities or policies of the school.

As those criteria mentioned in the Law on the Supervision of Education and descriptions of the characteristics of a good school self-evaluation have scattered among many different aspects, the definition of a good school self-evaluation is still not clear. To elaborate better, the following would discuss about and describe the behaviors and thoughts of individuals in schools, which have reached the ideal stage of implementation of school self-evaluation. The presence of such behaviors and thoughts is strongly related to and depended on the support of the school (Fullan, as cited in Kyriakides & Campbell, 2004). If the school is not providing sufficient support, individuals may not be able to share those behaviors and thoughts.

The success of the implementation of school self-evaluation would help all the stakeholders, who are involved in the process of school self-evaluation, be committed to learning, and therefore would think carefully about what they should do, evaluate what they have done, and learn from what they have found out from the evaluation (Kyriakides & Campbell, 2004). Such a learning habit would be rooted in the individuals and cause individuals to learn continuously. Therefore, individuals would show a burning ambition, throughout the process of school self-evaluation, to examine and review their own practice.

When the use of school self-evaluation is ideal, individuals involved would contribute actively toward school improvement and share a responsibility towards change – to foster change, to continue the change, and to evaluate the process of change (Kyriakides & Campbell, 2004). Schools have sometimes neglected the fact that changes are often initiated within the school, by only one or more individuals (Dalin, 1998). When individuals have such an attitude towards change, they would act as a detector to find out areas to be improved, as an initiator to start the process of change and improvement, as a manager to maintain the process, and as an examiner to evaluate the process of change. This would be a never-ending process (Deming, Gray & Wilcox, as cited in Kyriakides & Campbell, 2004), as individuals are never settled with their practice and are continuously looking for room to improve.

A strong sense of commitment and ownership to the school self-evaluation is found in the ideal schools (Kyriakides & Campbell, 2004), where different school stakeholders participate actively in the process of evaluation and in the improvement of the means of evaluation. Individuals are given opportunities to give voice to their opinions and suggestions, which could make a difference in their daily school practice, and are treated as equal partners in the process of evaluation. Such a share of power helps to encourage individuals to be more involved in the school self-evaluation. The increased

involvement in school self-evaluation is shown when individuals take an active role in participating in, and furthermore, improving the process of school self-evaluation.

Data collection is one of the very important aspects in school self-evaluation. At the ideal stage of the implementation of school self-evaluation, individuals not only are willing to provide evaluative data, but also treat collecting data as part of their own responsibility (Kyriakides & Campbell, 2004). The more involved the individuals are in the process of starting changes, the more ready the individuals are towards the changes (Dalin, 1998). Individuals are actively involved in the process of data collection, when they are willing to volunteer information and to influence others to provide information during the evaluation process.

In order to help individuals reach the stage to behave and think like above, in order to implement school self-evaluation ideally, several elements are essential. The following elements are derived from the work of several educational researchers, and each element is explained in detail below:

- Clear aims and purposes of school self-evaluation (Dalin, 1998; Kyriakides & Campbell, 2004)
- An open school culture (Dalin, 1998; Kyriakides & Campbell, 2004; Saunders, 1999)
- Participation of all school stakeholders (Dalin, 1998; Saunders, 1999)
- An all-rounded evaluation (Saunders, 1999)

Since school self-evaluation involves stakeholders inside and outside the school and different people think different things are important to evaluate, it is important to state clearly the aims of the school self-evaluation and what need to be done to reach the aims. The school therefore has to establish policies and procedures, in order to ensure clear understanding of the aims among stakeholders. A school culture which accepts open discussions and has a positive attitude towards school self-evaluation is very likely to be successful and effective (Saunders, 1999). Stakeholders have a positive attitude towards school self-evaluation, when they know that the process of school self-evaluation would bring about changes and improvement in the school (Meuret & Morlaix, 2003). The role of school leaders has a great influence on creating an open school culture (Louis, Toole & Hargreaves, 1999; Dalin, 1998).

As different people have different opinions and perceptions of change (Fullan, as cited in Dalin, 1998), it is important to involve all school stakeholders in the process of school self-evaluation in order to get a full picture of the performance of the school. The participation of all stakeholders would also help enhance the school climate, as there are interactions and discussions among different stakeholders (Meuret & Morlaix, 2003). Other than the involvement of all school stakeholders, it is also important to involve many different kinds of questions in order to have an all-rounded school self-evaluation, because different perspectives should be incorporated into the evaluation (Nevo, as cited in Saunders, 1999). This would allow school to have a clear understanding of the different needs of stakeholders and to be more ready for improvement.

## 2.2 School Changes and Development

As the implementation of quality care systems in schools is one of the continuous school changes, continuous school change would be discussed here and is defined as changes that tend to be ongoing, gradually developing, and cumulative (Weick & Quinn, 1999). Small changes and adjustments, which occur at the same time in different school units, could cumulate and create important school change. The continuation of school change is directly connected to school culture (Trice & Beyer, 1993), because the school culture controls and influences how school stakeholders deal with the changes. There are more factors that associate with the issues of continuity, for example, changes that cost less, involve more interpersonal relationships, encourage ownership, and are accompanied with good technical support and motivated leaders are more likely to continue (Dalin, 1998).

Costly school changes are less likely to continue because financing is a burden to school, once the school cannot sort out its finance, the school changes must have to stop as the school cannot afford it. Changes that involve more interpersonal relationships would encourage ownership, both the good interpersonal relationship and sense of ownership help stakeholders be more involved in developing and improving the school changes from time to time. It is believed that changes occur and continue the most during daily casual conversations (Barrett, Thomas, Hocevar & Dixon, as cited in Weick & Quinn, 1999). Good technical and professional support provides clear guidelines and help, and motivated management provides great mental support for continuation of school changes.

It is suggested that a school organization, which is ideal for continuous school change, should have the following features (Weick & Quinn, 1999):

- It states and defines clearly the responsibilities of individuals and priorities of projects.
- It has highly flexible and continuously changing design processes of school changes.
- It has greatly connected communication systems.
- It intentionally links present projects with the future ones.

The implementation of quality care system is one of the continuous school changes, as the desired development of the quality care system is to be first introduced, then maintained, and continuously adjusted and refined for further development and improvement. If a school wants to succeed in and continue the implementation of quality care system, the school should boost its stakeholders' sense of ownership to the quality care system so they would be involved and take an active role in it. Treating stakeholders as equal partners and involving them in the design process of the priorities of the quality care system could not only increase their sense of ownership and commitment, but also give them a clear idea of the matter.

The sense of ownership could also be built in individuals by encouraging more interpersonal communications. The start of the process of changes is always initiated through small talks and discussions among stakeholders (Louis, Toole & Hargreaves, 1999). The school should have good communication systems, so individuals could easily reach out to one another whenever they have doubts or questions. When doubts about the quality care system are discussed with others, there might be a start of readjustment to the on-going improvement process of the system. Because of such kind of on-going improvement, the school must be flexible towards adjustments and changes in order to continuously improve its quality care system from time to time.

As the implementation of a quality care system is examined later in this paper, the phase of implementation would be discussed further here. To cut a long story short, individuals would learn how to work with the changes and make the changes work in the school. To facilitate such an implementation phase, the school should first follow this three-step procedure – state the required changes, put the changes into practice, and monitor the progress (Beckhard & Harris, as cited in Cummings, 2004). In order to implement, and furthermore, continuously improve the quality care system, the school should identify the role of different stakeholders and gain their support (Cummings, 2004). As the quality care system has involved different school stakeholders, the school should state clearly the purpose of the system and the support needed from the stakeholders, in order to recruit support from the stakeholders. The school could initiate the start of the implementation by creating an attractive future of the quality care system to the stakeholders (Collins & Porras, as cited in Cummings, 2004) and continue the quality care system by providing enough internal and external support for the stakeholders (Laderriere, 2000).

During the implementation of the quality care system, after the basic three-step procedure is carried out and the implementation is put in practice, there would be changes in individuals' attitudes towards the system. There is a general three-level learning stage – learn to achieve the goals set by the school, learn to refine and modify the goals to fit own needs, and learn to design more effective learning processes to learn better (Bateson, Argyris & Schön, as cited in Cummings, 2004) – that individuals would experience. Individuals would first learn about the basics of the quality care system, such as its

goals and purposes, at the beginning stage. Once they have understood the school's side of the story and put the implementation in practice, they would reach another stage of the learning process and try to interpret the goals and use the quality system for and to improve their own practice. Individuals then would reflect on what they have learned and interpreted, in order to develop other ways to help themselves learn better and achieve more in the quality system.

As mentioned that school improvement is the primary goal of quality care in schools, the concept of school development is one of the typical examples of school improvement. It is suggested that school development would occur under the interacting influences of three major changes – planned, natural and unexpected (Louis & others, 1999). Planned changes are usually triggered by the losses in the organization (Dunphy, as cited in Weick & Quinn, 1999), so activities are planned and organized to achieve certain educational reform. Natural changes refer to activities that are expected to occur in the mechanism of the school, for example, changes in technology and replacement of retired staff. Unexpected changes result from unplanned or unforeseen activities which would bring about both positive and negative effects in the school development. Though only planned and natural changes are examined in many researches in analysing schools, the powerful and important effect of unexpected changes should not be ignored (Daft & Huber, as cited in Louis & others, 1999).

## 2.3 The Concerns-Based Adoption Model (CBAM)

The Concerns-Based Adoption Model (CBAM) is a multi-part system, which describes the process of development experienced by individuals during the implementation of innovations (Hord, 1987). It is based on the assumption that change is best understood when it is expressed in functional terms – what persons actually think and do when they are involved in the change.

Therefore the development of CBAM was initially based on two basic parts – the Stages of Concern (SoC) and the Level of Use (LoU). The SoC pays attention to individuals' attention relating to the innovation. The LoU focuses more on individuals' behaviours and interactions with the innovation. The CBAM used both the SoC and LoU to describe the process of change of the implementation by focusing on individuals' feelings about it and their behaviour with respect to it.

As change involves developmental growth, the focus of facilitation is with individuals, innovations, and the context (Hord, Rutherford, Huling-Austin, & Hall, 1987). CBAM therefore provides for the development of instruments based on the design of the innovation and the operational patterns of the users of the innovation being evaluated. The measure of the operational characteristics of an innovation is "Innovation Configurations".

### 2.3.1 Innovation Configurations (ICs)

Innovation Configurations (ICs), an innovation-centred part of the CBAM, are the operational patterns of the innovation that result from the use of different innovation component variations. Different innovations have different components, but the components will generally include characteristics of the innovation (Hall & Loucks, 1978). Each component can be varied or changed. How the component variations are selected, how they are organized, and the way they are used by the actors would produce different innovation configurations.

#### 2.3.1.1 Components and Variations of the Innovation

Innovation components, later called implementation components in this thesis, are those which must be present for the innovation to be in use. To determine the components of the innovation, three questions are believed to be the most useful (Hall & Loucks, 1978):

- What would the observations be when the innovation is implemented?
- What would individuals be doing?

- What are the critical parts of the innovations?

Both developers and users of the innovation should be interviewed to determine the relating components. Variations from ideal use to unacceptable use for each component have to be carefully determined, by interviewing a small sample of users of the innovation. There are essential and related components – those that must be present and those that may be adopted to enhance the innovation (Hord, 1987). It is therefore necessary to discuss further with the developer about the found components, in order to refine and select the important components.

#### 2.3.1.2 Innovation Configuration Checklist (IC Checklist)

After identifying and specifying the components and the relating variations of the innovation, an Innovation Configuration Checklist (IC Checklist) could be drawn up, which consists of the components and a set of variations within each component.

There are various types of checklists that may be adopted. The most basic kind of checklist provides a limited amount of information – different variations for each component. A more complex checklist gives not only the information of components and their variations, but also some indication of the relationship between the individual's actions and the stage of innovation. In this more complex checklist, the components and their respective variations are placed in the order from unacceptable to ideal behaviour.

The most important feature of an IC Checklist is that it should be written in working and operational terms, by which users of the innovation could understand (Hall & Loucks, 1978). The Checklist should state clearly what has to be done and who is doing what. It is said that the combination and grouping of the variations of each component is sometimes not very important, depending on the nature of the innovation, as long as all the essential components and variations are present (Hord, 1987).

The Innovation Configurations can be used to analyse the quality of implementation of the quality system in schools, as the IC Checklist shows what an innovation must be composed of, how it is put into practice, and how actions and quality of implementation are related. Once an IC Checklist is piloted and validated, it could be used in written or interview format to collect and analyse date to determine the progress and stage of development of the innovation.

Hord (1987) developed a four-step procedure for identifying innovation configurations:

| **Step** | **Process** |
|---|---|
| 1 | Interview developers and facilitators to identify innovation components |
| 2 | Interview a small group of facilitators |
| 3 | Draw up an IC Checklist |
| 4 | Complete a Checklist for each facilitator |

Table 2 *A 4-step procedure for identifying innovation configurations*

# CHAPTER 3 RESEARCH METHODOLOGY

## 3.1 IC Checklist

### 3.1.1 Development of the Checklist

Emails are sent to parties that are involved in the quality care system in Dutch secondary education, which included some experts, the developer and users of quality care system in the TCC, to ask for information about the implementation of quality care system and to arrange for an appointment. The experts are persons of Q5 who are involved in the ABC project, and of the Dutch Education Inspectorate who are involved in the secondary education. The experts are inquired about the background information and important components of quality care systems in Dutch secondary education. The wide variety of choice of implementation components, found from literature review, are then narrowed down and drawn up to a list, after the interviews with the experts.

The developer of the quality care system in TCC is then interviewed to further inquire about the major features of the quality care system in TCC, which is based on the ABC project and INK Management Model, and his opinions on what components are important for the implementation of the quality care system in schools. Another list of important implementation components is produced. After comparing between the two lists drawn up after interviews with the experts and developer, four implementation components are nailed down to be put in the IC Checklist, by finding implementation components that appear on both the lists and those that are described as very important by the parties. The four final implementation components, accompanied with brief explanations, are sent to the experts for further comments.

Once the four implementation components are finalized, another stage of the development of the checklist is started – identification of variations of each component. Literature about school changes and development is reviewed in a hope to find out some common trends of development of the implementation components. Face-to-face interviews are then arranged with five users of the system in TCC, who are randomly picked from the four school locations. The five members include four heads of department and one location director from the four school locations – Losser, Potskampstraat, Lyceumstraat, and De Thij. They are asked for their opinions on the four components identified, which included their observations of the development of each component from the beginning till now and their expectation of the further development of each component. Information from the literature review and the interviews combine to form the first draft of the Checklist, which show the four implementation components and their variations in the order from the beginning to ideal stage.

### 3.1.2 Validation of the Checklist

The draft of the Checklist is then sent to the experts for comments. Appointments are arranged with experts, if necessary, for further discussions about the development of the components and the order of the variations. After adjustments are made and the final draft of the Checklist is produced, an interview guide is drawn up to interview persons of different school locations to find out the locations' positions on the Checklist. The Checklist and interview guide are then piloted in one of the five school locations, Denekamp, to establish the reliability and validity of the instruments. Location Denekamp is chosen because the school location has the smallest size and simplest structure among all the TCC school locations.

The location director, head of department and one of the teachers from the department are interviewed over the phone, the same way as how interviews are carried out later for data collection. The interview guide is used during the interviews to check if the questions are composed in operational terms that could be understood by school members, and if more questions have to be added in the guide. Notes are taken during the interview, in order to be used to check the effectiveness of the questions, if

answers obtained from the questions are useful for the Checklist. After all the questions on the interview guide are asked, the school members are asked some open questions in a form like:

"*Can you describe the development of (components) in your school from the beginning to now, and also further to an ideal stage*."

Such open questions are asked in order to validate the Checklist, for example, if all the variations are practical and included, and if the variations are in good order. Opinions collected from the school members are jotted down for further examination and, if necessary, further adjustments of the Checklist.

After necessary adjustments are made on the Checklist, the refined drafts of the Checklist and interview guide are sent to the experts again for further comments. Phone or face-to-face interviews, if necessary, are arranged with the experts to further discuss about the adjustments and the instruments. Once agreement is reached with the experts, the Checklist and interview guide are finalized and ready to be used in data collection.

### 3.2 Data Collection

As mentioned earlier that Innovation Configuration (IC) and its collected data are fundamentally connected to behaviour, one of the means to measure behaviours of individuals in the Level of Use (LoU) is used in this research project for data collection – one-legged interviews. To perform a successful one-legged interview, several skills are needed which include asking right open-ended questions, listening attentively, and interrelating one question with another (Hall & Hord, 1987). The general strategy for the interview is to start in an extremely open question, probe to clarify the problems, analyze interviewees' responses, then intervene accordingly to address the relating problems.

One of the reasons why one-legged interviews are used in this research project is that, the flexibility of one-legged interviews helps to solve the problems with the hectic schedules of school members to be interviewed. Since each of the school members has a schedule fully packed with school activities and meetings from early morning till late afternoon, they could only squeeze the 20-minute interview in between their activities. As a face-to-face interview costs too much hassle and time in the arrangement, an interview over the phone is chosen after careful discussions with the school coordinator. A phone interview is very much welcomed by the school members as the time is easy to adjust and they could choose their most suitable time out of the busy schedule.

Four of the school locations of the Twents Carmel College are researched into. All the locations directors and heads of department, who have not been interviewed at the stage of development of instruments, of the four school locations are interviewed over the phone at this stage of data collection. Each of the heads of department has to refer one of the teachers from his/her team for the phone interview, as the school coordinator is not able to provide the information about teachers, and the heads of department are believed to know the best about their teachers so could choose a teacher who has time and feels easy to be interviewed in English. There is a total number of 23 interviewees – 3 location directors, 10 heads of department and 10 teachers. The distribution of the 23 potential interviewees is displayed in Table 3.

| **Location** | **Number of Interviewees** | **Positions of Interviewees** |
|---|---|---|
| Losser | 3 | Location Director: 1<br>Head of Department: 1<br>Teacher: 1 |
| Potskampstraat | 5 | Location Director: 1 |

| | | |
|---|---|---|
| | | Head of Department: 2<br>Teacher: 2 |
| Lyceumstraat | 8 | Location Director: 0<br>Head of Department: 4<br>Teacher: 4 |
| De Thij | 7 | Location Director: 1<br>Head of Department: 3<br>Teacher: 3 |

Table 3 *Distribution of potential interviewees*

Several dates, which are supposed to be less busy school days, are chosen for the school members to choose from for the phone interview after careful discussions with the school coordinator. A mass email, with the information of the research project and the available dates and time to be chosen from, is sent to the 23 school members two weeks in advance, so the school members could reply individually by email with their chosen date and time.

### 3.3 Data Analysis

As data collected in this research project consist of words and observations – qualitative data – but not numbers, examination and analysis are needed to bring sense and understanding. Qualitative analysis is used to analyze the qualitative data in this research, as it provides ways to understand, examine, analyze and interpret the data from multiple angles, in order to determine how the data could answer questions at hand (Frechtling & Sharp, 1997).

As revisiting data always happens during the process of qualitative analysis to develop deeper understandings of the data, qualitative analysis is always misunderstood and mistaken as an approach which has no rules, is not systematic, and is not objective (Frechtling & Sharp, 1997). Though there are relatively less standardized procedures in qualitative analysis than statistical analysis, there is a common 5-step process of qualitative analysis (Taylor-Powell & Renner, 2003):

1. Understanding the data
2. Identifying key questions
3. Categorizing information
4. Identifying relationships within or between themes
5. Interpreting the data

The above 5-step process is not strictly followed in this qualitative analysis, because there is a different order of the analysis process and some steps are not necessary in this research. For example, preset categories are used in this research so categorizing information has been moved to step 1. Present categories are themes identified before the research to provide direction for what to look for, so data are collected and searched for the themes (Taylor-Powell & Renner, 2003).

To put it in a nutshell, there is a 4-step process in the data analysis of this research – identifying four themes (implementation components), identifying key questions, understanding data, and identifying relationships within themes. Four implementation components are nailed down at the beginning stage of the research, as explained in detail earlier. After reviewing the four themes and the research questions of this research, some questions are identified to be answered in this analysis:

In regard to the reactions of schools towards the four innovation components,

a. What are the responses of each interviewee to each component?

b. Are there any deviations from the responses of interviewees of the same school to each component? If yes, what may explain the discrepancies?
c. What are the overall responses of each school to each component?

Qualitative analysts are also suggested to move back and forth to the following questions during the process of qualitative analysis (Frechtling & Sharp, 1997):

- Are there any differences within these themes? If yes, could the different responses be explained?
- Do the responses give any interesting information? How can the evaluation questions be elaborated by such information?
- Could the identified themes be explained by other past qualitative analyses? If not, how can the differences be explained?

To help understand the data collected better, a table is drawn up to summarize the data collected. The table would display the summary of information and, if there is any, key quotes provided by each interviewee. Remarks are made to highlight each interviewee's attitudes and relating position on the Checklist, in order to ease the work of identifying relationships within each theme.

Two relationships are identified at the last step of the data analysis:

1. The relationship within each school, a summary of the responses of interviewees
2. The relationship between schools, a summary of the similarities and differences among the responses of schools regarding each theme

The two relationships have to be found out to help answer the key questions identified in step 2. A table is drawn up to help find out the two relationships during the process of evaluation. The summary of the responses of interviewees of each school should be carefully found out as it determines the position of each school, regarding to each innovation component, on the Checklist.

| Themes | School | Summary of the response of each school | Relationship between schools (Similarities) | Relationship between schools (Differences) |
|---|---|---|---|---|
| Teaming | S1 | | | |
| | S2 | | | |
| | S3 | | | |
| | S4 | | | |
| Communi-cations | S1 | | | |
| | S2 | | | |
| | S3 | | | |
| | S4 | | | |
| Data Collection | S1 | | | |
| | S2 | | | |
| | S3 | | | |
| | S4 | | | |
| Goals | S1 | | | |
| | S2 | | | |
| | S3 | | | |
| | S4 | | | |

Table 4 *Display of relationships*

Since many words and sentences would be needed to describe the similarities and differences among the responses of interviewees and schools regarding each theme, Table 4 would only be used to help

draft out some key points during the process but not be used to display the findings of the relationships in the thesis. The relationships within each school and between schools would be described in detail in paragraphs.

## CHAPTER 4 RESULTS

### 4.1 Instrument Development

#### 4.1.1 IC Checklist

A more complex IC Checklist would be drawn up in this research study, which lists out the components, their relating variations and the relationship between the individual's practice and the developmental stage of the innovation. Table 2 shows a sample of the IC Checklist to be developed in this research project.

| Implementation Components | Component 1 | Component 2 | Component 3 | Component 4 |
|---|---|---|---|---|
| Excellent | C1V10 | C2V10 | C3V10 | C4V10 |
| | C1V9 | C2V9 | C3V9 | C4V9 |
| Good | C1V8 | C2V8 | C3V8 | C4V8 |
| | C1V7 | C2V7 | C3V7 | C4V7 |
| Satisfactory | C1V6 | C2V6 | C3V6 | C4V6 |
| | C1V5 | C2V5 | C3V5 | C4V5 |
| Unsatisfactory | C1V4 | C2V4 | C3V4 | C4V4 |
| | C1V3 | C2V3 | C3V3 | C4V3 |
| Bad | C1V2 | C2V2 | C3V2 | C4V2 |
| | C1V1 | C2V1 | C3V1 | C4V1 |

Note: C1V1 – Variation 1 of component 1

Table 5 *Sample IC Checklist*

Because of the limited time, only four essential components – teaming, communication, data collection and goals – are chosen over others in this research project after careful discussions with individuals involved in different quality care activities in the Netherlands. Each component is followed by a column of carefully interpreted variations, placed in the order from bad to excellent. The five different stages of development – bad, unsatisfactory, satisfactory, good and excellent – are clearly stated with the use of five different colours – red, orange, yellow, blue and green respectively – in the table.

The IC Checklist is composed of the implementation components, their variations and the stages of development, by which each has to be identified through the review of literature and interviews with different persons.

##### 4.1.1.1 Implementation Components

Components of the implementation of the ABC framework are initially identified through the review of documents of the ABC project, and literature about the implementation of a quality care and school self-evaluation system in schools. To understand the implementation of a quality care and school self-evaluation system based on the ABC framework better, three different experts who are involved in the pilot ABC project are interviewed – three of the developers and facilitators of the ABC framework, the developer of the quality care system in the TCC, and an expert of inspection in Dutch secondary education from the Education Inspectorate. They are asked, through emails and face-to-face interviews, for their opinions on the factors or components that are the most important for the implementation of the quality care system in Dutch secondary education.

The important components proposed by the experts, in the interviews and exchange of emails, are briefly listed out in Table 6.

| **Expert(s) from** | **Important Components of the Implementation of a Quality Care System in Dutch Secondary Education** |
|---|---|
| The Dutch Education Inspectorate | - A good understanding of the school's current situation of the quality care system<br>- A well formulated aim<br>- A goal to improve<br>- A systematic approach of data collection and evaluation<br>- Good internal communications<br>- A motivated school board |
| Q5 | - A systematic process of description and evaluation<br>- An aim to improve in learning and teaching<br>- The participation of different school stakeholders<br>- A good school culture<br>- The strong linkage with other school development planning |
| TCC | - A good means of data collection<br>- The participation of "everyone"<br>- Interactive feedback<br>- Open school culture<br>- A good understanding of the needs of students and the public |

Table 6 *Opinions of experts on the implementation components*

The expert from the Dutch Education Inspectorate is involved in the aspect of inspection in secondary education. She believes that a good quality care system must start with a good understanding of the school's current situation, in order to find out what have been done and what have to be done. The aim of the quality care system should be well formulated, and be known and understood by individuals involved in the school. A motivated school board is necessary to take an active role in implementing the quality care system and influencing others' attitudes towards the system. Good internal communications would also help the development of the quality care system. Schools should use the quality care system to reach the goal to improve. There must be a systematic approach of data collection and evaluation, in order to understand the school better and to take appropriate measures to improve.

The experts from Q5 have pinpointed five important components, which are interrelated to one another, of the implementation of a quality care system in secondary schools. A school culture which encourages evaluation and supports improvement is very important, because such a school culture would boost the participation of stakeholders in the implementation process. The quality care system should aim at improving learning and teaching in the school, and the aim should be shared within the school. A systematic process of description and evaluation is needed, for the school to understand the learning and teaching and to find out ways to improve. Improvement could only be made when the quality care system is part of the school development planning.

The developer of the quality care system in the TCC has spotted out five important components from his experience and observation of the process of implementation in the TCC. As mentioned and emphasized in the TCC, a good means of data collection is crucial to involve every stakeholder of the school in the quality care system. In order to have a good understanding of the needs of different

school stakeholders, the school must have an open culture that accepts different opinions and encourage interactive feedback to collect the opinions.

The literature reviewed have suggested several components that matter to the implementation of a quality care system in schools, they included motivated leaders (Cuttance, 1993; Dalin, 1998; Karstanje, 2000), good understanding of the school's current situation (Tjio, 2005), an open school culture (Cuttance, 1993; Dalin, 1998; Sallis, 1993), a strong linkage between the quality care system and other school plans (Dalin, 1998; Sallis, 1993), a systematic approach of data collection and evaluation (Cuttance, 1993, Sallis, 1993), good communications (Karstanje, 2000), and well-formulated and –shared aims (Cuttance, 1993; Dalin, 1998; Karstanje, 2000; Sallis, 1993; Tjio, 2005). Since some of the components were mentioned by individual experts when they were asked for factors that were the most influential to the implementation of a quality care system in Dutch secondary education, the components that were mentioned both by the literature and the experts have been picked as the four implementation components in the Checklist. The four components are:

- Mutual teams must take responsibility for their own quality.
- There must be means of communicating with people, inside and outside the individual school, about the quality.
- There must be means to collect and evaluate data systematically.
- There must be clear and shared goals.

The above components are then described respectively as teaming, communication, data collection and goals in the IC Checklist. When mutual teams take responsibility for their own quality, this would shape the climate of the school that supports and encourages the implementation of the quality care system. Small changes in school units are easier to be initiated and would bring along influence over the entire school (Dalin, 1998). As communication is regarded as an important factor in the implementation of the quality care system, the communication with different stakeholders is to be researched into. The aspects of data collection and goal of the quality care system are also to be researched into.

#### 4.1.1.2 Variations and Stages of Development

Variations for each component consist of detailed actions and responses of individuals involved regarding to the innovation, and are arranged along a continuum by which individuals' behaviours are changing gradually. The variations of the four components are identified by reviewing relating literature and interviewing a group of users of the quality care system in the TCC.

A group of school members, five to be exact, randomly chosen from four of TCC's school locations was interviewed, to inquire about their opinions on the identified implementation components. Users of the quality care system were interviewed, because they could share what they had seen and experienced in their school since the beginning of the implementation of the quality system. Members of this focus group were chosen from more than one school locations, in order to find out critical variations that could be observed in different schools. The five members included one of the heads of department from location Losser, one of the heads of department from location Potskampstraat, the location direction and one of the heads of department from location Lyceumstraat, and one of the heads of department from location De Thij.

Members were asked to describe the development of each implementation components. After the review of literature and individual interviews with the focus group of school members, the four components were elaborated and variations were listed out on the IC Checklist. Variations are arranged in a way that each successive variation moves from the beginning to the sophisticated stage of development. Five stages of development – bad, unsatisfactory, satisfactory, good and excellent – are identified. One or more variations would be categorized under each stage of development.

The five stages of development are drawn up in combination with the observable behaviors of Level of Use (Hord, 1987) of the Concerns-Based Adoption Model (CBAM). After discussions with one of the developers of the ABC project of Q5 about the stages of development in the Checklist, agreement was reached to define the five stages of development in the way displayed in Table 7.

| **Stage of Development** | **Level of Use** | **Observable Behaviour(s)** |
|---|---|---|
| Excellent | VI Renewal | The person is seeking an alternative innovation for further improvement. |
| Good | V Integration<br>IVB Refinement | The person is reaching out in regard to the innovation.<br>The person is making adjustments to improve. |
| Satisfactory | IVA Routine<br>III Mechanical Use | The person is sticking with the innovation.<br>The person is adjusting the innovation into his/her practice. |
| Unsatisfactory | II Preparation | The person is getting ready to use the innovation. |
| Bad | I Orientation<br>0 Nonuse | The person is learning about the innovation.<br>No solid action is taken with respect to the innovation. |

Table 7 *Definition of the five stages of development*

From the review of literature and interviews with expert, the definitions of the ideal performance of the four components are (Education Inspectorate, 2000; Osborne, 1993):

- Every school member takes the responsibility to implement, secure and improve the quality system.
- There is a constant flow of communication in the school, so the opinions and wishes of different staff members and interested parties are heard.
- The school translates the concept of good quality of education into aims and goals, which are understood by different stakeholders.
- The school will examine systematically if it has reached the aims and goals, and will then seek for further improvement.

#### 4.1.1.3 Validation of the Index

The validity of the instrument refers to the degree that the results derived from the instrument, the IC Index in this care, are meaningful, useful and appropriate (Brualdi, 1999). There are three traditional means to validate a test or an instrument – content-related, criterion-related, and construct-related validity. Content validity has been adopted in this research.

Content validity is based on expert judgments about the plan and procedures used in the instrument in order to find out how well the content and use of the instrument relate to and represent the area of interest. For example, if the process could ensure that appropriate responses are elicited, and if the content of the instrument could show the reality and behaviors of the area of interest (APA, as cited in Messick, 1990). Experts and some users of the quality care system were used in this research to construct validity for the IC Index.

The IC Index was piloted in one of the school locations, Denekamp, that is not involved in the data collection of this research. Three individuals – the location director, the head of department, and one of the teachers from the department – were interviewed. They were asked during the interviews to establish the variations of the four components for the quality care system. The variations established by the individuals reflect the real practices of school members implementing the quality care system. As the variations established are consistent with those on the Index, the Index is proved to be valid as it provides results that are appropriate.

The Index was also sent to experts, two of the developers of the ABC project, for validation, as they could examine the plan and procedures used in instrument construction to find out – if the content of the instrument could show the reality of the area of interest, and if the behaviors displayed in the instrument could represent the reactions of the area of interest. This part of the validation of the IC Index is further elaborated in the section followed.

#### 4.1.1.4 Expert Review

After the review of literature and individual interviews with the focus group of school members, the four components were elaborated, and variations were listed out on the IC Checklist and were put into different stages of development. The draft of the Checklist was sent to the same experts from Q5 and the Education Inspectorate for comments. Experts from Q5 and the Education Inspectorate were consulted about the variations and stages of development of each component, because experts from Q5 could share what they have noticed from the five pilot schools of the ABC project, while experts from the Education Inspectorate could share what they have found from the periodical inspections in schools.

Open questions have been used to elicit the suggestions and recommendations from the experts about the reliability and validity of the IC Checklist. The questions were asked separately as at different stages of the development of the research instruments. All the questions used are listed below:

- *Do you understand the items in the IC Checklist?*
- *Are all the important variations of each component present in the Checklist?*
- *Are the variations placed in a correct order, of the range from bad to ideal?*
- *Does the Checklist show the real situation in schools?*
- *Are the five stages of development – bad, unsatisfactory, satisfactory, good, excellent – set correctly?*
- *Could you suggest where the Checklist should be improved?*

The validity of the IC Checklist was approved by two of the developers of the ABC project of Q5, who also provided a list of valuable recommendations of areas to be further improved in the Checklist. Several words have been adjusted to avoid misunderstanding and to help the Checklist be more reader-friendly. Table 8 shows the list of adjustments of words in the Checklist.

| **Old version** | **New version** |
|---|---|
| Interaction | Communication |
| Standardized data collection | General data collection |
| Tailor-made data collection | Specific data collection |

Table 8 *Adjustments in the IC Checklist*

"*Interaction*" was used as an equivalent for "*communication*", but has been replaced by "*communication*" to avoid misunderstanding of the degree of actions and to make the Checklist more coherent. The means of data collection, that shares the same structure, has sets of common questions and is used among all the school locations, was described as "*standardized*". But as the word "*standardized*" carries more complicated meanings behind, "*general*" is used instead as the word is good enough to explain that the means of data collection includes a lot of common but necessary questions. The means of data collection, which involves some questions to particular aspects, is described as "*specific*", instead of "*tailor-made*", because the means is not completely changed to fit one school but is only slightly adjusted to pinpoint some particular issues.

During the final stage of discussions with the one of the developers of the ABC project of Q5 about the Checklist, there were doubts about the order of some components. Though the development of the implementation components was proved to be practical through interviews with members of the pilot school location and discussions with the experts of Q5, since the IC Checklist is fundamentally behavioural and behaviours of individuals are always so dynamic that do not follow only one trend to develop, there were doubts if the order on the Checklist can represent what is going on in every school. As no absolute law has been discovered yet on the development of some components in the Checklist, the "IC Checklist" has been strongly advised, by the expert of Q5 and my mentors, to be changed and called an "IC Index" instead.

The experts also suggested adding some more implementation components in the IC Checklist, such as the resistance to change and leadership, but due to the lack of time to further research into other implementation components, the suggestion has not been adopted to keep the Checklist less complex and more focused. After final adjustments were made, the Innovation Configuration Index has been finalized, as shown in Table 9.

| | Implementation component A: Teaming | Implementation component B: Communication | Implementation component C: Data collection | Implementation component D: Goals |
|---|---|---|---|---|
| 1 | The team continuously seeks for other alternatives that fit them better | The network continues to expand | The means of data collection continues to improve | The new goal is being discussed, evaluated and improved |
| 2 | The team refines the goals and plans | There is a network formed between individuals inside and outside the school | Individuals of different groups seek to further improve the data collection | A new goal takes over |
| 3 | There are discussions over the goals and plans | There are active and frequent communications between insiders and outsiders of the school | There are inter-group discussions about the improved data collection | Individuals seek for a new goal that fits their current situations better |
| 4 | The team evaluates on their goals and plans implemented | There are little and infrequent communications between insiders and outsiders of the school | The small-scaled, specific data collection is improved to be even more related to the learning and teaching process | Individuals seek for a new goal that fits their current situations better |
| 5 | The team questions about the goals and plans | Individuals try to communicate with others outside their school | There are discussions and evaluations on the small-scaled, specific data collection | Individuals are not satisfied with the goals |
| 6 | The team sticks with the set of goals and plans | Individuals are curious about seeking communications with the outside world | There is a small-scaled, specific collection of data | Individuals follow the goals and fit them into their work |
| 7 | The team shapes up its own goals and plans | There are constant flow of communications from one group to another | There is a small-scaled, specific collection of data on a trial basis | The goals are refined by the individuals to overcome their doubts and question |
| 8 | Team members and their leader share same ideas and beliefs | There are active communications among one's own group | Individuals discuss informally with others within their own group about the new ideas | There are discussions among individuals about their doubts |
| 9 | Team members propose new ideas to and discuss with their leader | Individuals bring questions and ideas, developed from inter-group communications, back to their own group for discussion | Individuals have new ideas on the collection of data which are more directly related to the learning and teaching process (without taking actions) | There are doubts and questions about the goals |
| 10 | There are spontaneous meetings between team members and their leader | There are active and frequent inter-group communications | Individuals question about the general collection of data | Individuals follow their re-interpreted goals |
| 11 | Team members discuss with each other and create new ideas | There are little and infrequent inter-group communications | Individuals are satisfied and stick with the general, large-scaled collection of data | Individuals re-interpret the given goals in their own working terms |
| 12 | There are discussions and exchange of ideas between team members and their leader during formal meetings | Individuals start reaching out to seek for communication with individuals of other groups | The general, small-scaled data collection is enlarged into a large-scaled one | Individuals try to fit the goals with their daily work |
| 13 | Team members give suggestions to their team leader during formal | There are active and frequent communications among one's own | Individuals seek to collect more data for better comparisons | Individuals understand the goals and their relating interpretations |

| | | | | |
|---|---|---|---|---|
| | meetings | group | | |
| 14 | There are informal discussions only among team members | There are little and infrequent communications among one's own group | Individuals are satisfied with the general, small-scaled collection of data | There are discussions among individuals about the goals and their meanings |
| 15 | During formal meetings, team leader tells others his/her new ideas and asks for comments | Individuals use the available means to reach out to others in their group | Individuals discuss on and question about the general, small-scaled collection of data | Individuals try to find out the interpretation of the goals themselves |
| 16 | Team leader gives order to team members and decides on everything during meetings | Individuals pay attention to and question about the available means | There is a general, small-scaled collection of data | Individuals know about the goals, but each of them has a different interpretation of goals |
| 17 | Each team has regular, formal meetings | Means are available for individuals to communicate with each other | Individuals discuss on and question about the informal and small-scaled collection of data | Individuals hear about the goals, but do not understand them |
| 18 | Each team is informally led by a leader | Individuals seek to communicate with each other | There is an informal, small-scaled collection of data | Individuals are curious about what the goals are and seek for the answer |
| 19 | There are working teams casually formed | There are small, informal talks among small groups of individuals | Individuals seek for means to collect data | Individuals know there are goals, but are not sure what exactly they are |
| 20 | There are informal discussions among individuals on working problems | Individuals do not know about the available means of communication with one another | Individuals are curious about their performances and outcomes | There are goals set, but individuals do not know about them |
| 21 | No specific working teams formed | Everyone works on his/her own without communicating with each other | There is no means of data collection | No goals formed |

Note:

| | |
|---|---|
| | Excellent |
| | Good |
| | Satisfactory |
| | Unsatisfactory |
| | Bad |

Table 9 *IC Index*

### 4.1.2 Interview Guide

As IC is fundamentally behavioural and data collected to devise it is also behavioural, IC is somehow like the Level of Use (LoU) of the Concerns-Based Adoption Model (CBAM). Therefore, one of the means to measure behaviours of individuals in LoU – one-legged interview – is adopted in the process of data collection in this research project.

One-legged interviews are brief, informal conversations that might take place in anywhere at any time. Some of the major elements of one-legged interviews are – asking, encouraging, listening, and probing (Hall & Hord, 2001). Interviewer should ask open questions, which encourage interviewees to describe what they are doing, how they feel about what they are doing and what they are thinking of doing, and listen to the answers with an open mind without making assumptions. Interviewer should probe lightly from time to time to clarify understanding by, for example, asking for relating meanings and examples.

The advantages of using one-legged interviews are its great flexibility and depth. As the interviews could take place anywhere at any time in any form, for example, a face-to-face meeting in the lounge room during lunch or a conversation over the phone between classes, this helps interviewer find out required information without bothering the day-to-day demands of the interviewees' work and responsibilities. Since probing and follow-up questions could be asked during the interviews, interviewer is able to have a better and more in-depth understanding of the issues and of what the interviewee is trying to say.

When the "IC Index" is developed, an interview guide is drawn up to help interview users of the innovation in order to fit the users into the Checklist. One of the most recommended methods of data collection for IC is developing interview questions specific to the components of the innovation (Heck, Steigelbauer, Hall & Loucks, 1981). Open questions are used in the one-legged interviews to probe the users about each of the components and to encourage the users to provide more information relating to the component. Different follow-up questions are asked to understand better the actions and behaviour of the users, regarding each component. Table 10 shows the list of questions to be asked in the one-legged interviews with school members.

| | |
|---|---|
| How long have you been working at this position in this school? | |
| Is it okay if we say that your school has a quality system? | |
| Can you briefly describe the quality care system in your school? | |
| A. | Component: Teaming |
| | Describe how your team works.<br>What is your role in your team?<br>Can you describe the most desirable way that your team should work? |
| B. | Component: Communication |
| | How is the communication between you and<br>- your team<br>- teams from other Twents Carmel Colleges<br>- people outside the Twents Carmel College<br>- others<br><br>What do you think is the ideal communication between you and<br>- your team<br>- teams from other Twents Carmel Colleges |

| | |
|---|---|
| | - people outside the Twents Carmel College<br>- others |
| C. | Component: Data Collection |
| | How is data collected in the quality system?<br>How do you use the data collected?<br>What is the ideal means of data collection? |
| D. | Component: Goals |
| | What are the goals of the quality care system?<br>How did you know about the goals?<br>What is the ideal goal(s) of the quality care system? |
| Do you have any further suggestions to or comments on the current quality care system in your school? | |

Table 10 *Interview guide*

Notes are taken during the interviews to jot down what the interviewees say during the interview, so the notes can be used in the processes of summarizing and analysing the collected data.

#### 4.1.2.1 Reliability Test

Reliability has been defined as "the degree to which test scores for a group of test takers are consistent over repeated applications of a measurement procedure and hence are inferred to be dependable and repeatable for an individual test taker" (Rudner & Schafer, 2001, p2). There are several measures of reliability that are commonly used, included test-retest reliability, split-half reliability, measures of internal consistency, and alternate form reliability.

A pilot test of the IC Index and Interview guide was performed in Location Denekamp, in order to establish instrument reliability, enhance construct validity, and revise and finalize configuration components and the interview guide. The alternate-form reliability has been focused on in this research study. An alternate but equivalent form of questions was generated and tested during the pilot test – each question is asked in two different ways to find out if the answers derived are consistent. It is believed that the repeated question could lead to maturation and learning that could measure the reliability (Rudner & Schafer, 2001).

As the alternate form of the questions was proved to be useful in the pilot test, two forms of questions are used in the interviews of data collection of this research. The interviewees are asked each question in two different ways. This could not only provide a measure of consistency and reliability, but also help interviewees have a better understanding of the question in order to provide an appropriate answer.

### 4.2 Summary of Interviews

5 of the 22 interviews was not able to be carried out, as one of the location directors did not reply to confirm the phone interview after several approaches, two of the heads of department did not refer a teacher from their team, and one of the heads of department refused to be interviewed and to refer a teacher due to the tight schedule. After 18 out of 22 interviews were carried out, questions developed in the interview guide and other follow-up questions were answered in detail. The distribution of the 18 interviewees, who were interviewed, is shown in Table 11.

| Location | Number of Interviewed Interviewees | Positions of Interviewed Interviewees |
|---|---|---|
| Losser | 3 | Location Director: 1<br>Head of Department: 1<br>Teacher: 1 |
| Potskampstraat | 4 | Location Director: 0<br>Head of Department: 2<br>Teacher: 2 |
| Lyceumstraat | 7 | Location Director: 0<br>Head of Department: 4<br>Teacher: 3 |
| De Thij | 4 | Location Director: 1<br>Head of Department: 2<br>Teacher: 1 |

Table 11 *Distribution of Interviewees*

All the answers were reviewed for several times to spot out some important information for later analysis, to highlight some quotes that could support the interviewee's point of view, and to read between the lines to find out the interviewee's real feelings towards the questions. The answers to questions of each implementation component from each interviewee were gathered and summarised, so a table of the summary of interviews (Table 12) has been drawn up.

S1 to S4 were used in Table 7 to represent the four school locations of TCC – Losser, Potskampstraat, Lyceumstraat and De Thij – respectively. As interviewees wish to remain anonymous, their name and job position would not be mentioned in the table so their identity would be kept secret. Each interviewee would be given a code, for example, S1A, which means interviewee A from location Losser, in order to ease the summarization of data. The table would show the general summary of each interviewee's response and key quotes to each theme. A remark, which included a brief statement about the relative position on the IC checklist and the relating reasons, was made after each summary.

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| Teaming | S1 | S1A | Team leader has taken up the role as a leader and gives specific instructions to team members regarding to complaints and general descriptions to goals to be achieved. Team members are given freedom and autonomy to find their own ways to achieve the goals. They are encouraged to discuss the results of questionnaires to make plans for the coming school year. | "We use results of questionnaires as a blueprint to make improvement."<br><br>"We are still trying to adjust to a new school culture" | A9, team members have regular meetings for discussions. |
| | | S1B | As the school is relatively small and is composed of only two departments, the teaming is not very significant. Team member sometimes takes up the role as a leader in certain aspects, because of the casual and easygoing structure in the school. | | A9, as the roles are not fixed, so the person has taken an active role in giving suggestions and commenting on current situations. |
| | | S1C | Team member is involved in official, regular meetings arranged by the school management, and in informal discussions with his/her own team. Team member uses meetings as a means to catch up with the latest news of the school location and with the results of questionnaires; and uses informal discussions to reflect his/her opinions and suggest new ideas on school issues. | "Being in a team is just a formality." | A10 – 11, the culture is not enough to encourage the person to speak out openly. |
| | S2 | S2A | Team leader always discusses results of questionnaires with team members, in order to work on areas that have received poor results. Team leader always leads the discussions and proposes new ideas, while team members listen and follow the proposals most of the time. | "Quality system is not the highlight of my team. Teaching and Learning is more important." | A12 – 13, team leader has taken the main role in discussion while team members only volunteers little information or ideas. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S2B | Team leader and members work closely together, and there are spontaneous meetings and informal discussions all the time. Team leader would carry out discussions while team members only show their opinions while the issue is very related to their work and responsibility. | "Teacher is not a leader." | A9 – 10, there were spontaneous meetings and team members propose new, but only work-related, ideas once in a while. |
| | | S2C | Team leader acts as an initiator by asking team members for opinions and comments on the results of questionnaires. Though the majority of team members are followers, some team members have taken an active role in suggesting new ideas and sometimes new targets for the team. | | A8 - 9, some team members have taken an active role in giving new ideas and are try to make new plans. |
| | | S2D | There are regular meetings five times a year, when team leader and members discuss about the results of questionnaires and try to find alternatives to answer the needs of clients better. Team members mostly follow the flow and give out comments from time to time. | | A9 – 10, team members are not very eager to share new ideas and show their opinions. |
| | S3 | S3A | The team discuss about the results of questionnaires together. Team leader asks members to set goals of the team together, but the leader is always the one setting the goals while the members only comment on the proposals and ideas later. Team members are given the rights to ban the proposed goals, but they have always accepted them without giving further comments. | | A8 – 9, team leader and members share same ideas though the members tend to be more passive in giving suggestions. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S3B | The team discuss about the results, both good and bad, of questionnaires, to find out the needs of students. Team leader is always open for new ideas and comments, though team members tend to focus only on very work-related and practical matters. | | A9, team members are active in suggesting ideas on practical issues. |
| | | S3C | Team leader always divide the team into small groups, where team members take up a role as a leader in the groups. Each group has to raise questions and propose new ideas, which are gathered for later discussions with the entire team in order to draw up new plans. Team members comment a lot and give out many ideas because of such an arrangement. | "Each team member is also a leader. They (team members) show a lot of opinions." | A8 – 9, though team members are more used to taking an active role in speaking out (a change of culture), they are still not able to shape up solid plans. |
| | | S3D | Team leader always encourages members to give out opinions and advices. Team members are glad that they are given such an opportunity, but they sometimes find it difficult to have their voice heard as the team is quite big. Therefore, some team members still tend to be a follower instead of wasting the effort to speak out, unless the matter is directly related to their daily work. | "Our team spirit is – speak as much as possible!" | A9, team members are open to giving out work-related suggestions and ideas, but still tend to be more passive most of the time. |
| | | S3E | Team leader gives clear guidelines of what to achieve and detailed descriptions of projects, because the team is composed of mainly new teachers. The goal of the team is set by the team leader and the director of the school, the team is left with room to further develop the goals. But since team members are new to the team and to the school, most of the ideas come from the team leader only. | "I give strict guidelines of what to achieve to help the new teachers in my team" | A11 – 12, as the team is still new, team members do not give many opinions or ideas to the leader, but only among new members who share more or less the same knowledge and experience. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S3F | Team leader is open for advice and opinions, but is not proactive enough towards the use of the results of questionnaires. Team members discuss about the results with each other more than with the team leader. | | A11, team members tended to have more casual discussions with each other than with the team leader. |
| | | S3G | Every action or new idea must be discussed with the team for approval, to find out if the team could or wanted to do it. Since most of the team members have more than 30 years experience in education, team leader has taken up the role as an initiator to encourage team members to give opinions and ideas. Though most of the new ideas come from the management level, team members are happy with the ideas. | "I have been trying to be in good speaking terms with my team." | A9 – 10, team leader and members are trying to work on the climate of exchanging ideas. |
| | S4 | S4A | Team leader is responsible for providing general targets to be achieved and financial means to teams, and managing the processes of teams. Each team has complete freedom of what to do in order to reach the targets and is encouraged to comment on the targets set. Teams have not proposed many new ideas on the targets so far. | | A9 – 10, team leader is trying to build up the culture to encourage new ideas but team members still tend to keep ideas to themselves. |
| | | S4B | Team leader acts as a counsellor to help experienced teachers overcome the difficulty of working in a team, as they used to work alone. Team members tend to care the most about their students, classroom and their work. Team leader has succeeded in getting team members to comment more, using the results of the questionnaires to focus on discussing about teachers' work and their students' needs. | | A9 – 10, team members share the same ideas with the leader and are trying to give out more ideas and comments. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| Communication | | S4C | Team leader and members have regular meetings eight times a year. Team leader tries to encourage team members to tell what they think or want. Team members tend to show their opinions through informal discussions and chatting instead of meetings. | | A9 – 10, team members still needed to be more active in proposing new ideas as the situation is getting better and better from time to time. |
| | | S4D | Team leader makes plans and shows them to team members. Team members tend not to be against the plans during meetings, but they do not always follow the plans or put them into practice. | | A10 – 11, team members do not work much with the leader though they seem to work as a team. |
| | S1 | S1A | There is good communication in the team and with the team in the same school location. Since there are only infrequent meetings with teams in other TCC's, the person would like to have more discussions with those teams in order to learn from each other. | "We should learn from each other and have more communications with other TCC's." | B6, the person is willing and eager to reach out. |
| | | S1B | Communications among S1 is good, because the school is quite small and therefore is easy to have communications between groups. Communications with teams of other TCC's are rare, only occasionally at regular meetings. Communication with parents is not that active as parents are not willing to come to school too often. | | B7, there is active and frequent inter-group communication that has initiated even more communication within each team. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S1C | Communications among her own team is good, but with teams of other TCC's are rare. The person sometimes comes into contact with individuals from other TCC's to exchange information due to certain work tasks. There is no communication with parents, other than the regular "parent nighst" where the person has to spend 8 minutes with each parent. There is only enough time to talk to parents about practical matters, and is not the person's responsibility to go any further. | | B4, there is infrequent communication with individuals from outside the school. |
| | S2 | S2A | Communication in the team is quite good, but could be improved better. Communication with teams of other TCCs was through regular meetings only, in which only very practical issues are mentioned because of the lack of time. **(T)** There is not much communication with parents because it is not the person's responsibility to deal with parents. | | B13, there is good communication in the team but the person is not very eager to reach out because of the lack of time. |
| | | S2B | Communication in the team is excellent. There is regular communication, through official meetings, with other teams of TCC's , but was only limited to discussing about practical issues. There is not much communication with people outside the school location, but the person sometimes takes an active role to contact parents when the parents have not shown up in regular meetings for too long. | "If some parents have not come here (the school) for too long, I would go knock at their door myself." | B5, there is good communication in the team and among teams, he has taken an active role reaching out to parents. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S2C | Communication in the team is excellent. There are occasional discussions with other teams about the results of questionnaires, but mostly about the practical problems to be tackled. Communication with parents is alright as there are regular meetings with them twice a year. | | B10 – 11, inter-group communication is very limited to work-related issues. |
| | | S2D | Because of the background of other team members, the person has found the communication with them quite hard. There is not much communication with other teams either, but the person sometimes reaches out to other teams to discuss about results of questionnaires and to seek for solution to some practical problems. The person is not very eager to take an active role to speak to parents, because that is not his/her responsibility. **(D)** | | B11 – 14, both communication in his team and between teams are of equal amount – little and infrequent. |
| | S3 | S3A | Communication in the team is good. Communication with other teams is not very often, only four times a year through regular meetings, where practical issues would be discussed. Communication with outsiders is limited to very practical matters through official meetings. | | B13, the communication is mostly limited to the person's own team, and the person is not eager to reach out. |
| | | S3B | Communication in the team has been excellent. There are frequent informal meetings between the team and other teams, because of the current shared job task. Communication with outsiders is strong because the person is responsible for matters dealing with parents. | | B3, the person has active communication with outsiders of the school, other teams and parents. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S3C | Communication in the team is excellent. There are sometimes informal meetings with other teams, when the person discusses his/her evaluation with the others and asked them for feedback and advice. Communication with parents is bound to the official activity, because of the lack of time. **(T)** There is occasional meetings with other schools to ask them for opinions on S3. | | B4 – 5, the person has tried to reach out to other teams outside of the school to look for advice and feedback. |
| | | S3D | The team itself communicates very well. Communication with other teams has been better now because of the publication of results, so each team is more aware of other teams' work and talk more to other teams. But improvement is still needed so there would be more communication between teams. Communication with parents is rare, because parents had other means to reach the school. | | B11 – 12, there is good intention of reaching out to other teams for discussion about the results of questionnaires. |
| | | S3E | Communication of the team is quite good, as clear targets are given and discussed. The team communicates often with other teams in the same school location, but rarely with teams in other school locations. There is infrequent communication with teaching institutes to tackle practical problems. | | B4 – 5, the person is not eager to and finds it necessary to reach out, unless reaching out could solve some practical problems. |
| | | S3F | Communication of the team is alright. There is communication with other teams, to tackle practical work-related problems through regular meetings. There is communication with parents only through regular school meetings, and parents have been very supportive by filling in the questionnaires and attending meetings to discuss about the results. | | B13, the person has no intention to reach out him/herself but is bound to official meetings. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S3G | There is excellent communication in the team. Communication with other teams in the same school location is great, to discuss about new strategies and how to deal with new changes. There is not much communication with outsiders of the school, because it is not the person's responsibility. **(D)** | "There is very active communication between heads of department (of the same school location). We talk about new management directions, new work ideas and new strategy." | B8 – 9, the active communication between teams in the same school location helps the team work better. |
| | S4 | S4A | Communication within the team is good, as there are regular and spontaneous meetings to discuss about practical issues and results of questionnaires. There is not much communication with other teams as it is not necessary. Communication with parents is limited to the regular monthly meetings. | "I don't meet teams of other school locations to talk about the results, because it (questionnaire) is only a benchmarking tool." | B13, communication is only good in the team and the person is not eager to reach out as it is thought to be unnecessary. |
| | | S4B | There is good communication in the team. Communication with other teams is quite good, because the person meets with other teams to discuss about their problems and collected advice from each other. There is communication with outsiders, say parents through regular meetings. There are infrequent official meetings with other school organizations, to learn from others to improve. | | B4 – 5, the person is eager to reach out to others to improve. |
| | | S4C | Communication in the team is good, as more new and young teachers who are willing to speak out have joined the team, communication in the team has been improving, as the new teachers influence and initiate some old teachers. Communication with parents is not that much, as there are too much things to talk about with too little time during official meetings. **(T)** | | B13 – 14, as the team is still young, the person is spending most of the time working on communication in his/her own team. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| Data Collection | | S4D | The team communicates quite well. The person discusses the results of his/her questionnaires with members from other teams in the same school location. There is not much communication with parents, as the person is not interested in that | | B12, the person goes to other teams for advice and suggestions to improve his/her work and performance. |
| | S1 | S1A | The questions for students are not specific enough to nail down students' needs. The need of additional questions has been discussed with the developer of questionnaires, but it is quite time-consuming for the person to take care of this apart from his/her daily work (**T**). The questions for teachers are not critical enough to focus on the process of learning and teaching. The person wants to know more from different stakeholders, but he/she believes that the school should not ask too much or too often, or the stakeholders would find it too much and be not supportive. | "…more critical questions are needed to find out the real results."<br><br>"The structure and questions of the questionnaires have to be translated to fit our school."<br><br>"We cannot ask too much, we cannot ask too often. We cannot push too hard, it is too repeating and redundant." | C8 – 9, there are great ideas on how the data collection should be improved and some discussions are going on here and there. |
| | | S1B | The personnel evaluation is good as it helps personnel take an active role in evaluating themselves and their team. Parents once suggested to the person about refining the questionnaires, the suggestions have been passed on to the developer of questionnaires. New, specific questions to the school are expected in the questionnaires for parents and students in the coming school year. | | C7 – 8, new ideas are put into action as new specific questions are added to questionnaires. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S1C | The questionnaires are not clear enough as some personnel do not know from what perspective they should fill in the questionnaires. The questionnaires to students would only be useful if the questionnaire and questions are discussed about with students before, so students understand the aim of the questionnaires and the meaning of questions. | "I reflected my opinions better through informal discussions with team members and leaders than through questionnaires." | C8, there are good ideas and suggestions but they are only talked about during informal discussions among co-workers and no solid action has been taken. |
| | S2 | S2A | The current means of data collection is satisfactory, but questions should be specified to suit the team and school better. There are not many critical suggestions on the means of data collection because the person admitted that he/she has not enough time to study the questionnaires **(T)** thoroughly to criticize on them. The time of the delivery of questionnaires was suggested to be changed, but no specific period of time was mentioned during the interview. | "It is not my responsibility to improve the quality of the quality system." | C9 – 10, the person is questioning about the means and is trying to nail down some new ideas to improve it. |
| | | S2B | The means of data collection distributed to personnel is satisfactory, as it helps personnel evaluate and improve themselves better. The person has learned a lot from discussions with co-workers about the results. But questionnaires for students are not good enough, as some questions are too difficult for some students so students cannot provide critical information. Some students do not understand the aim and importance of questionnaires, and so do not take it seriously and provide information that is not helpful. | | C9, the person has many new ideas and suggestions but has not discussed with others about them. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S2C | The means of data collection is satisfactory in general, but the person has some suggestions in his/her mind. The suggestions are: questionnaires should be carefully designed to include as much information as it could, and should be adjusted from time to time as students and the school change constantly. Suggestions have not been reflected yet because the person thought it was not his/her duty to work on the improvement of quality system. **(D)** | "Some teachers came and asked me what the questions were for, because they felt insecure and frustrated in the beginning. But now they are happy with it" | C9, there were great ideas on improvement but were not discussed. |
| | | S2D | Questionnaires to students are very useful and the questions are very good, but data collected from students and parents is only useful to school management. Personnel could not work on the results of questionnaires to improve, unless the school cooperates and changes some policies accordingly. The person has never reflected such ideas to others. No solid suggestions have been provided during the interview. | | C10, questions have been raised about the means of data collection, but the person is counting on the management to make a change instead. |
| | S3 | S3A | The current means of data collection is good, but there is still room for improvement. Face-to-face interview is suggested to help collect more detailed information. | "We should collect data with face-to-face interviews instead. This may happen in the future, but not now." (no further explanation given) | C9, there are new suggestions to improve the means of data collection, but they have not been discussed.. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S3B | It was suggested that questionnaires should be filled in in another way, as students and parents cannot ask questions when they have doubts filling in the computerized questionnaires now. And as students and parents are tired of working on computers, their answers might not be reliable. Less multiple choice questions should be used in questionnaires, but more open question instead, to help collect more information in detail. | "I am interested in the results of the questionnaires and would discuss with others about the results, but would not talk to others about how to improve the questionnaires because I am not interested in that part." | C8 – 9, the ideas have been discussed among co-workers, though no solid action has been taken to make a difference. |
| | | S3C | Sometimes students reflected that they found it great that the questionnaires were submitted anonymously, but they were still worried that teachers could figure out who they were. Therefore, it was suggested that results should not be shown with the name of classes. More specific questionnaires would help personnel understand the quality of their team and school better. A specific set of question was made, and there have been discussions among the team to refine some questions for the coming school year. | | C5 – 6, a specific set of questions was designed and the team is now trying to refine and improve the questions. |
| | | S3D | The questionnaires are satisfactory as different stakeholders have been involved and the quality of questionnaires has been improving from time to time. Questionnaires for students should be more specific. | "The student questionnaires are too board." | C9 – 10, there are some questions and vague suggestions of the questionnaires. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S3E | The questionnaires for students are not satisfying, as students sometimes interpret the questions wrongly and so give unreliable answers. More aspects are suggested to be included in the questionnaires, to show more facts of the school and its education. There have been discussions with the developer and a more specific questionnaire is expected for the coming school year. | "They (questionnaires) are not showing clear facts, but only what is going on." | C7 – 8, a new specific set of questionnaire is expected after discussions with the developer. |
| | | S3F | No comments were given on the quality of the means of data collection, because the person found it not his/her responsibility to criticize on the means **(D)**. The person does not find the questionnaires that useful for self improvement, but has no suggestions to make a difference. | "The questionnaires were used for evaluating me so I could improve. But I have not much for improvement after teaching for so many years." | C11, the person only sticks with the means. |
| | | S3G | The current questionnaires for students and parents are satisfying as lots of valuable information is found out. More specific questionnaires should be used to find out the effectiveness and quality of some new strategy used in the team or school. There was a set of specific questions used, but some additional specific questions have been designed lately by the person and his/her co-workers, to evaluate better the work in the team and school location. | "It is very good that we designed our own questions to be asked, we would try out more in the future." | C4 – 5, the specific set of questions is further improved. |
| | S4 | S4A | The means of data collection was satisfying, but ideas have been suggested to the developer so some questions would be adjusted for the person's team and some arrangement would be made for the general questionnaires. | | C7 – 8, new adjustments of the questionnaires are on the way. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S4B | The means of data collection is found useful. The means is suggested to be designed in a way that could strengthen the relationship between management and personnel in order to achieve school improvement. | "I wrote letters to parents to explain about the questionnaires and our quality system. Or they won't understand." | C9 – 10, there were some vague suggestions but no solid action has been taken. |
| | | S4C | The means of data collection is good, as the results help personnel be aware of the quality of their work and so have self-improvement. Though the questionnaires are thought to be not specific enough, the person believes that specific questionnaires are not that useful anyway, because questionnaires are not used to deal with personal or detailed matters, but only to have a quick scan of the current situation. | "When there is improvement at the personal level, there would be improvement at the organizational level too" | C8 – 9, there are new ideas and discussions about them, but no solid action has been taken. |
| | | S4D | The means of data collection is good, but questions should be adjusted to be more focused on the goals of education and the process of teaching and learning. Suggestions have been reflected to the developer, but no reaction has been heard yet. | | C8, there are discussions to improve the means of data collection. |
| Goals | S1 | S1A | The goal of the quality system is to help make TCC a whole, and to improve the system better. There have been no serious discussions about the goal of such a quality system in the school. | | D13, the person tries to fit the goal of quality system into his/her daily work. |
| | | S1B | The goal of the quality system is to help make different stakeholders (teachers, students, parents and the school) more responsible for the education. The goal has been widely discussed and the new refined goal for the team is to have less inspection in the classroom. | "We went to England for a seminar of quality system." | D10, the original goal has been reinterpreted |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S1C | The goal of the quality system is to collect different stakeholders' opinions to help shape the role of school and improve the education. The person believes that everyone should work with the results of questionnaires in order to have improvement. | | D10, the goal of quality care has been reinterpreted to suit the person's work better. |
| | S2 | S2A | The goal of the quality system is to find out how personnel think and perform, and if specific tasks are done. The information collected should be used for long-term planning. | "It is not my duty to refine the goal of the quality system. I am a user." | D13, the goal has been understood and followed. |
| | | S2B | The goal of the quality system is to help focus and improve on the delivery of education | "If you want to use the quality system to improve, you would find worth it to spend the time" | D13, the goal has been understood and followed. |
| | | S2C | The goal of the quality system is to improve education. There have been some seminars to introduce the quality system, but the person admitted that seminars were not good enough and has suggested to have face-to-face meetings instead. For example, new teachers should each be guided by a personal coach, who could explain better the aims and functions of the quality system. | | D7, the goal has been interpreted and now new adjustment is suggested to refine the goal. |
| | | S2D | The goal of the quality system is to help individuals know better how and what others think, so they could improve. The person finds his own way to deal with the quality system – to be evaluated, read through the information, discuss with others, improve, then to be evaluated again – a cycle. | "The quality system helps us have a better look on ourselves from the perspective of people around us." | D10, the reinterpreted goal is followed. |
| | S3 | S3A | The goal of the quality system is to teach kids in a way that is the best for them, and such a goal still has to be achieved. | | D13, the goal is understood. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | | S3B | The goal of the quality system is to help the school find out how different stakeholders think about the school. To achieve such a goal, personnel should work on the results, try to find solutions to problems, and improve themselves. | | D10, the goal has been interpreted and followed. |
| | | S3C | The goal of the quality system is to improve the quality of education through data collection and the follow-up discussions. The person wants to use the quality system to help him/herself see better how students are thinking and be more involved in school matters. | "It needs lots of time, but (is) worth it because there are useful results" | D10, the goal has been interpreted and followed. |
| | | S3D | The goal of the quality system is to improve and to show stakeholders that comments and suggestions are always welcomed by the school. | | D13, the goal was known |
| | | S3E | The goal of the quality system is to find out how others think about the school and start discussions. The person has used the quality system as a start of discussion, to get others to be more involved. | | D10, the goal has been interpreted and stuck with.. |
| | | S3F | The goal of the quality system was to improve, but the person thinks that discussions about the results are not necessary as it should be the work for the management team. **(D)** | | D13, the goal has been understood but nothing has been done with it. |
| | | S3G | The goal of the quality system was to help the school be aware of and catch up with the ever-changing clients' needs. The person wants to use the quality system to help him/her be more aware of the new needs, and so to help the team better. | "Schools will and must move forward. This system is a good help." | D7 – 8, further interpretation has been made to shift from self-improvement to team improvement. |

| Themes | School | Interviewee | Summary | Key Quotes | Remarks |
|---|---|---|---|---|---|
| | S4 | S4A | The exact goal of the quality system cannot be nailed down, but the person believed that everyone had to work around the quality system and use the results of it. The results derived from the quality system have been used as a means to discuss with others about the targets to make some adjustments. | | D10, though the goal could not be nailed down with words, the person has interpreted the goal and put it in his/her work. |
| | | S4B | The goal of the quality system is to improve the education – by showing teachers what their students need and showing management what personnel need. The person has used the quality system to find out what more he/she could do for others to improve the quality of education, say providing more instruments or coaching. | | D10, the goal has been reinterpreted and followed with.. |
| | | S4C | The main goal of the quality system is to produce a better school. The quality system would give individuals an overview of what was happening. The person used the results to improve his/her work, but now is planning to use the results to improve his/her planning skills. | | D7, the goal has been understood, interpreted and refined. |
| | | S4D | The goal of the quality system is to improve education. The personal goal of the quality system is to make the person more professional in education and in teaching and learning. | | D10, the goal is interpreted in the person's own working terms. |

Note:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| S1 | Location Losser | S2 | Location Potskampstraat | S3 | Location Lyceumstraat | S4 | Location De Thij |

Table 12 *Summary of Interviews*

### 4.3 Positions on the IC Checklist

Table 12 was reviewed to summarize the persons' responses to find out the general response and attitude of each school, in order to position each school on the IC Index accordingly. To help find out easily the position of each school in each theme on the IC Checklist, Table 9 was simplified by omitting the detailed descriptions and was transformed into another table (Table 13) to display the positions of each school on the IC Index.

| | **Implementation component A: Teaming** | | | | **Implementation component B: Communication** | | | | **Implementation component C: Data collection** | | | | **Implementation component D: Goals** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **S1** | **S2** | **S3** | **S4** | **S1** | **S2** | **S3** | **S4** | **S1** | **S2** | **S3** | **S4** | **S1** | **S2** | **S3** | **S4** |
| 1 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | X | | | | | | | | | |
| 4 | | | | | X | | X | X | | | X | | | | | |
| 5 | | | | | X | X | X | X | | | X | | | | | |
| 6 | | | | | X | X | X | X | | | X | | | | | |
| 7 | | | | | X | X | X | X | X | | X | X | | X | X | X |
| 8 | | X | X | | | X | X | X | X | | X | X | | X | X | X |
| 9 | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X |
| 10 | X | X | X | X | | X | X | X | | X | X | X | X | X | X | X |
| 11 | X | X | X | X | | X | X | X | | | | | X | X | X | |
| 12 | | | | | | X | X | X | | | | | X | X | X | |
| 13 | | | | | | X | X | X | | | | | X | X | X | |
| 14 | | | | | | X | | X | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |

Note:

| | |
|---|---|
| | Excellent |
| | Good |
| | Satisfactory |
| | Unsatisfactory |
| | Bad |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| S1 | Location Losser | S2 | Location Potskampstraat | S3 | Location Lyceumstraat | S4 | Location De Thij |

Table 13 *Display of the positions of schools on the IC Index*

All four school locations perform evenly accordingly to the IC Index as their positions lie within the category of good in the theme of teaming. Location Losser can be categorized as good in teaming, as interviewees reflected in the interviews that there were always spontaneous meetings in the school and team members were willing to give voice to their opinions within their department. As the school location is small and is composed of only two departments, the location is, as described by the location director and one of the two heads of department, not very hierarchical and members are given lots of time and opportunities to take part in the process of decision-making. Although the interviewees all

agreed that the majority of members is open to taking an active role in proposing new ideas within their department, they also admitted there some members were still learning to grow out of their passive role in volunteering ideas and suggestions.

Members of location Potskampstraat appeared to have more different opinions and attitudes towards teaming, varied from sharing same ideas with the leader to speaking out only during informal conversations with co-workers. The differences are mainly due to the difference in the age, work experience and job position of the members. Teachers from two of the departments both admitted that they would mostly follow ideas proposed by their leaders, but would voice out more voluntarily when the issue is very related to their practice. One of the three heads of department explained that his/her team had been working on changing the climate within the department and that might lead to the differences as team members might still be learning about the new approach at different paces.

Three of the heads of department in location Lyceumstraat have been trying different means, included letting members be leaders in small groups and lead discussions, to encourage their members to give out suggestions and ideas. Most of the teachers of those heads of department seemed to understand and share the same belief with their heads of department, as two of them could pinpointed the belief and one of them even mentioned, "*Our team spirit is – speak as much as possible!*" One of the departments seemed to be less developed in teaming than the other three, as suggested by the index, because one of the teachers of that department admitted to be less willing to speak out and the head of department admitted that exchange of ideas mostly took place only during formal meetings.

Location De Thij has reached a stage in teaming in the index, when there are often spontaneous meetings, where team members propose new ideas and share their opinions, within each department. The interviewees, who take a role as a leader in a school or department level, showed during interviews that they have been encouraging members to speak out, by acting as a counsellor and an initiator. As reflected in one of the interviews, sometimes teachers did not reject new ideas proposed by the leader, but they would not put the ideas into practice in their work either as they did not agree with them.

Since the Twents Carmel College (TCC) has fixed up regular meetings for all the members with members within the team, the location, and TCC, and with parents, communication through only the regular meetings is not counted in the index. For example, if the person only meets parents through regular meetings and has no intention to communicate with parents him/herself, he/she is regarded as having no communication with parents.

Location Losser has reached a higher stage of development in the implementation component communication, according to the index. Interviewees all agreed that the communications within each department and among departments in the school are very good. They all gave credits to the relatively small school size and less complex structure of the location. As reflected by two of the interviewees, there were active and frequent inter-team discussions that always brought along more discussions and new ideas back to each department.

Locations Potskampstraat and De Thij seem to be developing at different paces in the component communication, as they have been shown in the index that they have spread across different stages of development in this component. Some heads of department and teachers from the two locations shared in the interviewees their experiences in inter-location projects, and they also showed more willingness and enthusiasm to reach out regarding the results of their evaluation from the quality care system. Other members, by contrast, showed in the interviews that they were not eager to communicate with other teams or persons outside their department and school, because they claimed that they either have not had time or have found reaching out to others not part of their work. There seem to be great differences in individuals' attitude towards communication within the two locations.

Location Lyceumstraat, as reflected in the interviewees, has individuals who have put in efforts in reaching out to other schools and training institutes in order to improve their practice, and also has individuals who have been try to sort out their communication problems with members of their own team. Individuals of this location, who are interviewed, showed to have been developing at different paces and have reached different stages in the index. One of the heads of department and a teacher from his/her department both admitted in the interviewees that, they have been spending most of their time trying to sort out the communication within their department because some new members have joined their department and they have shared different ideas and beliefs.

Location Lyceumstraat has reached, when compared to other locations, a higher stage of development in component data collection in the index. Two of the heads of department admitted during the interviews that they have asked for specific sets of questions, have worked with the sets, and are now refining the sets of questions for further understanding of their students. One of the heads of department said in the interview that he and his co-worker have been working on designing new questions to be put in the questionnaires to their students, so they could evaluate better what their personnel had done. Other teams, which have not yet had their own specific sets of questions, said in the interviews that they have been either discussing with the developer or having clear ideas on the area of improvement in the means of data collection. There are several good suggestions collected from members of this location, for example, questionnaires should be explained to students and parents to help achieve more reliable answers as they understand better and more open questions should be asked to find out more information in detail.

Locations Losser and De Thij have gained similar position in the index in the theme of data collection, because one of the two departments in location Losser and one of the four in De Thij have asked for and are using their specific sets of questions. Another one of the departments in location De Thij have been discussing with the developer about adjustments to be made for the questionnaires to students of his/her department. Other interviewees of the two locations showed in the interviews that they have paid much attention to the means of data collection and volunteered some suggestions to further improve the means for better understanding of their students and personnel. Location Potskampstraat seem to have reached a lower stage of development in data collection in the index, because most members admitted in the interviews that they have not taken solid action to help improve the means of data collection and have not paid much attention to improving the means. One of the interviewees said that he/she found improving the questionnaires not his/her responsibility but the developer's, so he/she has not put in much effort in examining the means.

Most of the school locations have reach a satisfactory stage in the theme of goals in the index, since most persons showed in the interviews that they have only worked up to the stage that they have interpreted the goal in their own working terms and are following the interpreted goal. The three interviewees of location Losser appeared to have understood well the goal of quality care system and interpreted the goal for their own work. Two of them admitted that they had been following their interpreted goals for quite some time since they have not yet achieved the goals in the full. Members of locations Potskampstraat and Lyceumstraat appeared to have similar pace in the development in the component goals. Some of the heads of department showed to share similar beliefs as they have been working on improving their interpreted goals to fit the needs of their department and relating clients better. Other heads of department and teachers showed that they have been following their interpreted goals for a while.

Location De Thij appeared to be more developed in the component goals. Both the location director, heads of department and teachers showed in the interviews that they have put in effort to interpret the goal into their own working terms and have been questioning and then refining the goals. One of the heads of department first interpreted the goal to help improve his own work, and now is refining the goal in order to shift the improvement from his own practice to his team.

The four school locations are shown to have even performance in the component teaming, and have generally reached the stage of good development in the Index. As the concept of decentralization has

been promoted among the school locations of TCC for years, different teams have been made in the units of departments and have been working autonomously since then. Members of the school locations are therefore used to such a school climate and have reached the stage, where the concept of working in a team has been openly accepted and the culture of giving voice to new ideas has been growing.

Location Losser is shown in the Index to have reached a higher stage of development in the component communication, when compared to the other three school locations. One of the significant differences between location Losser and other locations is that, location Losser has a smaller school size and a simpler school structure. As individuals could sort out communications within its school location easier, they are allowed more time to seek for communications outside the school. The other three school locations have a relatively larger school size and more complicated school structure, two to three more departments within each school, therefore there are more changes in personnel that hinder individuals to sort out communications within their department and school, and furthermore, to reach out to others outside the school.

Though the four school locations have reached the stage of good development in the component data collection in the Index, some locations have reached a higher position than others. As reflected in the interviews, most of the heads of department of location Lyceumstraat have taken a more active role in participating in activities about the quality care system and hence have taken more interest in the system. The school management and team leaders of other locations, by contrast, have shown less motivation and interest in the quality care system.

Location De Thij has attained the stage of good in the development of the component goals, as shown in the Index, while other locations between the stages of satisfactory and good. As reflected in the Index, location De Thij has not only understood but also been improving the goals of the quality care system, while other locations are working on putting the goals into their practice. De Thij is shown to have developed better in this component, because it is the first location where the quality care system was implemented. Individuals of De Thij, therefore, have been exposed to the goals of the quality care system for a longer time than others, and therefore started the development earlier and have reached a higher stage.

# CHAPTER 5 DISCUSSIONS

## 5.1 Scope of the Study

### 5.1.1 Data Limitations

More than one school organizations had been planned to be used in this research, but only the Twents Carmel College was used to avoid making the research too complex and too wide, as time and labour are limited in this research. This research was started later than planned because it took more time than expected to find a local secondary school that agree to be researched into in this project, which is carried out in English only. Other pilot schools of the ABC project were examined to find out the possibility of using them as other research targets in this research, as they have adopted the ABC framework and might share more common aspects with the Twents Carmel College for better comparison. When the schools used for comparison have most of their features in common, the factors distinguished could simply be regarded as the causes of the difference in the development. But since each pilot school has had different approaches on adopting the ABC framework, for example, TCC has combined the ABC framework with the INK Management Model, so it would be difficult and time-consuming to compare among schools, which share not many common features, to find out the un/favourable factors of the development of quality care system, the idea of using those pilot schools as other research targets was therefore given up.

The majority of location directors and heads of department was interviewed, but only one teacher from each department was randomly chosen to be interviewed for this research because the time to deliver the invitations to the persons clashed the school locations' examination period. After discussing with the school coordinator and hence understand the TCC's standpoint, not to stress teaching staffs with research interviews during the hectic examination period, an adjustment was made – only one teacher would be chosen from each department by the head of department to be interviewed. The aim of such an arrangement is to bother the least number of teachers while necessary information is collected. The teacher to be interviewed is chosen by the head of department, as suggested by the school coordinator, in a hope that the head of department knows better the schedule of the teacher so the teacher to be interviewed would have a less busy schedule and so would not be stressed by the routine work and the interview. The school coordinator was also concerned if teachers were proficient enough in English to understand the interview questions in order to provide answers that reflect the reality, therefore the head of department was advised to choose a teacher who could manage English conversations to participate in this research project.

Though students and their parents are involved and have an important role in the quality care system of the TCC, they were not interviewed in this research because the school coordinator did not have the contact information of parents and it needed loads of time and procedures to obtain the contact information from the administrative department of each school location. As there was not enough time to collect the contact information of students and parents, and furthermore to design a special set of instruments for students who are not that proficient in English, the idea was abandoned so the aim of project has been narrowed down from researching into all the stakeholders to only the school managers and teaching staff of the five school locations of TCC.

Observations are suggested, by relevant literature about the Concerns-Based Adoption Model (CBAM), to be used in identifying the stages of development of each implementation component set (Hall & Loucks, 1978). As the stages of development of the four implementation components set – teaming, communication, data collection, and goals – could not be identified by only one visit, more than one visits have to be arranged with each school location. It was difficult and too time- and labour-consuming to arrange so many visits to the school locations, and was almost impossible sit in regular school meetings to observe the teaming and communication during the busy examination period. After careful considerations, observation has not been included as the means of data collection because it cost too much time and labour effort and would not bring back that much information.

Other than open-legged interviews, open-ended concerns statement is another commonly used means to collect information for the Innovation Configurations (ICs), by asking interviewees to write a brief answer to an open question on a piece of paper. The structure of the open question is always like:

"*When you think about [innovation], what concerns do you have? Please be frank and answer in complete sentences*." (Hall & Hord, 1987, p88)

The open-ended statement was not used in this research, because the idea was consulted with school members at the first stage of data collection and was not that welcomed. It concerned the members that other school members might not be willing to write English, their foreign language, and the rate of participation would be low. They explained that phone interviews would be more welcomed, as it was easier to elaborate themselves and to ask questions if they do not understand the questions. The open-ended statement was not used, because of the reason mentioned by the members interviewed and the concern for the reliability of the answer because of the language barrier.

### 5.1.2 Other Limitations

Though there are many implementation components of the implementation and development of quality care system found from literature, only four implementation components – teaming, communication, data collection, and goals – have been used in this research. The four implementation components were nailed down because they were regarded, by school members of TCC and experts, as the most important components among others in the implementation of the quality care system in the TCC. Therefore, they have reflected the actual practices of the implementation of the quality care system in a Dutch secondary school. No more than four components have been included in the research because it takes loads of time to identify the different variations and stages of development of each component, so more time could be spent to research into each implementation component in detail.

The implementation components that have been screened from this research study, included the motivated leadership (Cuttance, 1993; Dalin, 1998; Karstanje, 2000), good understanding of the school's situation (Tjio, 2005), strong relationship between the quality care system and other school plans (Dalin, 1998; Sallis, 1993), and systematic approach of data evaluation (Cuttance, 1993, Sallis, 1993). The linkage between the quality care system and other school plans was not included in this research, because this factor is more related to the decision of management and less to the behaviors of school individuals. The main focus of interest in this research is the relationship between the implementation and the behaviors of individuals involved.

The component of data evaluation was not included in this study, because data evaluation takes place in different levels – management, personnel, and classroom levels – and there are complex linkages among evaluation at different levels. The component of leadership was not included in this study because of a similar reason, as the role of leadership is taken by persons in additional to the assigned school managers. Therefore, loads of time and effort is needed in researching into these components. Due to the limited amount of time and labour in this study, these components have been screened from the IC Index as they are not as crucial as the four selected components.

It is suggested, by the developer of the ABC project of Q5, that resistance to change is one of the key issues that must be addressed in school changes (Cummings, 2004). But resistance to change has not been included in the IC Checklist because the variations of resistance to change could not be identified unless long-term observations have been carried out in schools. Professional knowledge, on psychology and human behaviour, is needed to analyse the observations to identify the variations. Detailed examination is needed to find out the stage of development or changes in the resistance to change, as the driving and restraining forces are constantly inter-changing from time to time (Cuttings, 2004). As it is way too time- and labour-consuming to research into the resistance to change and include it as one of the components in the IC Checklist, the resistance to change is only included in this research as a factor that helps or hinders the development of quality care system in schools.

Though the current Index has been approved to be useful in understanding the implementation of the quality care system in a Dutch secondary school, according to the four implementation components, the Index would be more useful if more implementation components could be added, for example, the components of leadership and resistance to change. The more implementation components are present in the IC Index, the more in-depth analysis could be carried out regarding the implementation. The current IC Index is useful for starter schools as the very basic components are elaborated and displayed in detail, but if the schools want to apply the Index to more advanced components, this current Index has to be further developed to answer such a need.

Test-retest reliability is obtained by performing the same test twice and analysing the results. It is suggested to be an excellent measure of the consistency of the results (Rudner & Schafer, 2001). This measure was not adopted in this study, because of its great demand of time and labour to perform the interviews twice. It was already difficult to arrange time for an interview with the individuals, so it would be impossible to squeeze a second interview in the individuals' hectic schedule. The alternate-form reliability was adopted as it has the same benefits of maturation and learning of the interviewees, but is less time-consuming (Rudner & Schafer, 2001).

## 5.2 Factors in the Development of Quality Care System

As mentioned earlier, four different schools of the same school organization were used in this research project in order to provide a platform for easier comparisons between schools to find out the factors that are supposed to matter, positively and negatively, in the development of quality care system. For example, teams A and B each has one head of department and around 20 members, how come members in team A are more eager to be involved in improving means of data collection while those in team B are not? Factors that lead to the success and failure of the development of quality care system in schools would be identified below, by reviewing the information obtained in this research and the relevant literature in the fields of educational innovation, educational changes and educational management.

### 5.2.1 Favourable Factors

Several enthusiastic and motivated team leaders were found from the interviews, as they have been trying out different means to initiate and encourage their members to be more involved in the exchange of ideas and meeting with experts to learn how to help their members in the school changes. Team members in the teams of these team leaders were found to be comparatively more aware of what is going on in the school and more involved in giving voice to their opinions and ideas. One of the team leaders have tried to put his/her team into smaller groups and assign some members as group leaders, it was shown that many of the new ideas came out from team members in this team. This has proved that leaders who are motivated, enthusiastic, and willing to delegate administrative responsibilities could have bring about positive influences to their members and hence improvement to their school.

It has been proved in a one-year study that educational leaders must play one of the three roles – an initiator, an innovation manager, or a supporter – in school improvement (Hall, 1988). It was found in the studies that there must be more than one persons who took up one of the mentioned leadership roles in schools that succeed in carrying out educational changes. It is believed that leaders who set certain goals and leave the follow-up to the teachers are the most effective (Leithwood, as cited in Dalin, 1998). Though delegating power has been proved to be one of the favourable factors to the process of school change, leaders must on one hand let go some administrative power and on the other hand show enough interest during the process, in order to give members both the power and support. (Hall, 1988) When members do not receive enough moral support from their leader, the school change will be in trouble (Dalin, 1998).

This research has shown that the more the available resources are, the more involved the members are. The available resources include professional support, such as training courses and coaching. A team member, who joined some seminars in England about quality care system, was found to be very involved in the improvement of quality care system, as he/she has been taking an active role in proposing new ideas and suggestions to his/her leader and the developer of questionnaires, in order to make the means of data collection more effective. Another experienced team leader suggested during the interview that personal coaching should be used as a means of professional support to help team members understand the quality care system, and thus be more willing to take part in developing the system.

Continuous support and resources should be provided as the development and improvement of the quality care system in schools is an ongoing process (Dalin, 1998), only one or two preliminary training courses would not make any differences. The increased school member's mastery of quality care system would increase the school member's commitment to the quality care system. Schools are advised to make provision for some extra innovation resources, such as releasing personnel from work to attend seminar, in order to succeed in the development of quality care system (Visscher, 2002). As many persons reflected in the interviews that they were held back in the participation of the process of development mainly due to their lack of time, the arrangement of extra innovation resources could help sort the problem of time and could also show members the support of the school.

As mentioned by one of the experienced team leaders during the interview, teachers pay the most attention to and care the most about their teaching and their students, which should be used to attract teachers into participating in the quality care system. When team members were asked for their suggestions to improve the current quality care system and its relating means of data collection, two of the teachers answered,

*"It is not my responsibility to improve the quality of the quality system."*

*"I am interested in the results of the questionnaires and would discuss with others about the results, but would not talk to others about how to improve the questionnaires because I am not interested in that part."*

Many teachers thought that their responsibility was to fill in the questionnaires and review the results, but suggesting ideas to improve the quality of data collection was the responsibility of others.

One of the team leaders talked individually with each of his/her team members to explain to them how much their opinions on the questionnaires could help find out more about their students and hence improve their teaching. The leader emphasized the direct help of the quality of questionnaires on the improvement of quality of teaching, in order to get the teachers' full attention. Team members of the team showed more interest in giving out suggestions and new ideas to improve the means of quality care system. The more dependent the users are of the data collected with the means of data collection, the more involved the users are in improving and influencing the means (Visscher, 2002).

### 5.2.2 Unfavourable Factors

This research has shown that teams, which have more new team members, always gain a lower position in the index. For example, one of the teams which have recruited many new members was regarded as unsatisfactory in the index, because members of the team admitted to have spent most of their time trying to improve the communication within the team and have got not enough time to reach out to other teams, not to mention outsiders of the school. Another example is that, one of the team leaders said that he/she was giving more detailed instructions to his/her team members because they were new and unfamiliar to the teaching environment. When members are not familiar to their teaching environment and the school, it is impossible to ask them to give out new ideas for the improvement of the quality care system. Personal coaching was suggested by an experienced team leader to help new members be familiar with the school and its culture. This would help new members

build up a sense of ownership, which is important to the development of quality care system (Visscher, 2002).

The unfamiliarity of new team members is an unfavourable factor in the development of the quality care system, but the familiarity with education and the school of old team members is also a hindrance to the success of the development. Many team leaders reported that old team members tended to work alone and were less likely to accept new innovation, not to mention to propose new ideas and suggestions. Members' old work habits and security needs are two of the major causes for resistance to change (Cummings, 2004). As the most effective way to overcome resistance to change is to reduce the restraining force, so the driving force could continue to promote changes with less resistance (Cummings, 2004). One of the means to reduce the restraining force in the development of quality care system is to counsel old teachers on the aims and benefits of the quality care system. On-going mental and professional support are important to help old team members overcome their fears of insecurity and difficulties in dealing with new changes.

As decentralization has been widely promoted in schools as a result of autonomous education, many schools are divided into different departments and each department is allowed absolute freedom in its organization and management. The decentralized administration in schools leads to the deviation in the accents of education in different departments, like in the Twents Carmel College where different school locations have different emphases on their education and in the school locations of TCC where different departments have different attitudes towards some aspects. It was shown in the index that the development of quality care system was hindered by the deviation of the attitudes towards the implementation components in different departments, as some departments have change faster but some slower, because the former departments have put more effort in the theme but the latter otherwise. It is suggested that the consistency of implementation should be monitored, because performance difference within and between schools have been proved to be large (Stringfield et al., Hopkins & Reynolds, as cited in Visscher, 2002). The more consistent the school is, the more successful the development of the innovation is.

# CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

The majority of the research questions has been answered in the checklist and in Chapters 4 and 5, the last part of the research questions would be answered in this chapter. Though the four school locations have got an average of good and satisfactory at the stage of development in the four themes, there is still room for improvement so the locations could attain a higher level in the Checklist.

## 6.1 Suggestions to TCC

All the four locations have done quite well in teaming, according to the index, and have reached the level, where most of the members are getting used to having spontaneous meetings with their leaders and are beginning to give voice to their ideas and opinions more openly. As reflected in the interviews, teachers who have worked for longer in the school and in education are more resistant to working in a team, and hence have remained at a lower stage of development in teaming in the index. Team leaders of the more experienced team members must take up the role as an initiator, one of the three major leadership roles in educational changes (Hall, 1988), to provide continuous mental support, in order to encourage the experienced members to be involved in the team discussions and activities, and necessary professional support, in order to build up members' sense of commitment by increasing their mastery in the activities (Dalin, 1998).

It was shown in Table 13 that several school locations seem to have spread their positions across three different stages of development in the theme of communication in the index. It is a result of the inconsistencies in the development of the component in different autonomous teams within a school. As there are more individual working teams in those school locations and each team has been given great degree of freedom in its organization, every team has a different accent in its targets and therefore grow in a different pace in different aspects. The consistency in the growth of each implementation component should be measured within each school, in order to succeed in the development of each component (Visscher, 2002). A common feature was found among those locations – members who (have) participated in some inter-group or inter-school projects tend to be more willing to take an active role to communicating with people inside and outside the school. To help members who are not willing or eager to reach out and communicate with other persons, team leaders should assign those members to participate in some projects to help them take the first step in reaching out to individuals outside the team and the school. As proved by some members in the interviews, once the process of reaching out was initiated by their leaders, the members were able to go along and reach out more, in order to assist and improve their work.

Some school locations have reached a higher stage of development in the component data collection in the index, because more team leaders and members of those locations have taken a personal interest in the aspect of data collection. The majority of persons from the four school locations has reached a stage where they have questions on the current means of data collection and furthermore have ideas in the improvement of the means, but some of them have not yet taken any solid action to make a different. As found from the interviews, persons who have reached a higher stage of development in this aspect tend to have a stronger sense of commitment to the quality care system and have taken it as part of their responsibility. To boost the members' sense of commitment in order to attain a higher stage of development, school leaders have to take up a role as a supporter (Hall, 1988) to provide members with constant professional and renovation support. The more the members understand and know about the new innovation, the more the members are involved in influencing the innovation (Dalin, 1998). The professional and renovation support includes personal coaching, provision of professional resources, and provision of (sources of) information about the innovation.

One of the school locations was noticed in the interviews to have performed differently than others in the component goals, as most of its members have a good understanding of the goals. This location has arranged seminars to educate old and new school members about the goals of the quality system,

and has team leaders who take an active role in explaining the goals to each member individually from time to time. Other locations reflected that they have, by contrast, not seriously educated their members about the goals of the quality care system, but have only passed on the brief idea by word of mouth. When individuals who have reached a higher stage of development, refinement and reinterpretation, were asked for the reasons of their attitude towards the goals of quality system, they admitted that the better understanding of the quality care system and its relating goal, through seminars and personal coaching, has helped them be more involved and take more interest in the innovation. This proves again that the increased mastery would increase individuals' commitment to and concern of the innovation (Dalin, 1998).

### 6.2 Recommendations for Future Use and Development of the IC Checklist

The main aim of the production of the IC Index in this research is to produce an instrument, which could be used by researchers and schools, to measure the stage of development of each of the implementation components in the development of quality care system. The ideal use of the index is to help school leaders and members find out what they should do in order to further develop the quality care system. School members could learn from the index what assistance they should have received from the management, and so could ask for the specific assistance when necessary. As school leaders have to deal with great demands of their daily work, they may have missed out some important details in the implementation and development of the quality care system. The index could then be used as a reminder for school leaders, to ensure that sufficient support and resources have been provided for their members.

When schools are using the IC Index themselves for monitoring and checking, they must be reminded that the different stages of development would not go in only one direction all the time. School leaders and members may move up and down the stages from time to time, as it takes time for individuals to finally accept and put into practice a new concept or idea. As teachers tend to have a strong needs of stability (Dalin, 1998), more time is needed for teachers to make a move to start the process of change. Teachers are always well-known for their strong needs of security (Dalin, 1998), so they would take little by little in the process of implementation and would move backward for a bit when things come out differently than planned, in order to ensure nothing have gone or would go wrong. Therefore, IC Checklist should be constantly used to check up on the implementation of the quality care system, to make sure that development is coming on the right track – when the school has moved down in the Index, special attention has to be paid to find out if individuals are encountering problems.

Though the IC Index is derived from the Twents Carmel College, components included in the Index are basic components that every school would come across in the implementation of a quality care system. The implementation component goals and its relating variations could be applied to other schools without further adjustments because the behaviors of individuals displayed at different stages of this component in the Index are proved to be a common trend. Other schools, that use the IC Index, should pay attention to the components teaming, communication, and data collection. As the components teaming and communication are derived from the structure of TCC, these components may have to be adjusted if the other schools are having a different structure in management and administration. The display of the variations of data collection was derived from the means of data collection of TCC, so the development of data collection described is only related to the means of data collection that involves a wide variety of questionnaires to different school stakeholders, or has a similar approach.

As mentioned earlier that Q5 has been helping schools develop their own quality assurance system, this IC Index could be used as a guide for schools that are absolute beginners of the implementation of quality care system. When schools are implementing a quality care system from scratch, they may have no concepts of what have to be done and what is going to happen. To help those schools master the implementation of a quality care system, this IC Index could be provided so the schools could have an idea of what need to done to prepare the school and personnel for the implementation. As the IC Index displays the basic implementation components and their relating variations, it would help the starter schools build the necessary base of the implementation in order to develop later.

## 6.3 Improvement in the Research

The IC Index still has room for improvement and development itself. Time was limited in this research, as mentioned earlier, so only four implementation components have been included and elaborated in the index. More implementation components, which matter to the development of the quality care system, could be added and further developed in order to have the full use of the index. Other important implementation components, such as leadership (Cuttance, 1993; Dalin, 1998; Sallis, 1994), means of data evaluation (Cuttance, 1993; Hopkins, 1989; Karstanje, 2000; Tjio, 2005), and resistance to change (Cuttance, 1993; Dalin, 1998; Snyder, 1995), should be added. These implementation components are missing in the current IC Index because there was not enough time to research into their complex network of development. The addition of these components would make the Index applicable to more schools, but not only the starter schools and the TCC.

As reflected in the interviews, the component of leadership, in particular, has a great influence on the school culture, and hence, the implementation of the quality care system in the school. The addition of this component could not only advance the use of the IC Index, but also be a source to explain the behaviors and attitudes of individuals in some of the other components, such as teaming and communication. The resistance to change could be added in the IC Index to act also as a source to explain the responses of individuals in other components. More time should be devoted to identifying the variations of the resistance to change, as lots of variations are present in this component.

Observations were not used to identify the variations and relating stages of development of the current four implementation components, because of the lack of time and difficulty encountered in arrangements. Observations of the daily routine work and meetings of the school individuals could be used in the development of the Index, as it is suggested to be a good measure to find out and understand more about the real practice of individuals (Hord, 1987). The behaviors displayed in the IC Index could then reflect more about the real practices of different individuals in the school.

As mentioned before that an IC Index was formed instead of an IC Checklist, because of the lack of evidences and absolute laws on the sequence of behaviors of individuals in the implementation components. It may be possible to find out the common sequence of individuals' behaviors, but more time and professional knowledge are needed. More labour and time have to be devoted to observing the behaviors of individuals in their practice, in order to find a common trend of behaviors. Professional opinions on human behaviors could be consulted in order to explain and understand better the interrelationship between different responses. When the behaviors and responses of individuals in the components are studied in detail, a common sequence of behaviors could be derived in order to make the Index more useful for TCC and other organizations that are involved in the implementation of quality care systems in schools.

Interviews were arranged with all the location directors and heads of department and the majority of them was interviewed, but only one teacher from each department was interviewed because of the limited amount of time. Though the opinions of the one teacher from each department combines with those from the head of department could provide a clear picture of how the department functions, more teachers could be introduced in order to boost the reliability of the data. Because of the presence of language barrier, the heads of department were requested to refer a teacher from their team to ensure the reliability of the answer to the questions. In order to choose teachers randomly from the departments, regardless of the proficiency of English, interviews could be arranged to be performed in both English and Dutch.

To ensure the reliability of information derived from the interviews, test-retest reliability could be used when more time and resources are available. Alternate-form reliability was used in the study, by asking questions in two different ways in each interview, because of its

advantage of the demand of comparatively less time. The alternate-form reliability could be slightly adjusted by performing the data collection in two forms – one-legged interviews and open-ended concerns statement – in which same questions are asked. Open-ended concerns statement is a means to gather information by asking individuals open questions, relating to the area of interest, and asking them to write the answer in short paragraphs (Hall & Hord, 2001). The adjusted alternate-form reliability could allow interviewees to find the right English words to explain themselves, and researchers to further analyse individuals' responses by reading between lines. Test-retest reliability could be used instead, because this would provide interviewees more time to warm up their English so they could explain themselves and elaborate their opinions better.

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