



STUDENTS' PERCEPTION OF THE ROLE OF TELE-COLLABORATIVE LEARNING PROJECTS: A CASE OF THE GLOBAL TEENAGER PROJECT AT MUCHEKE HIGH SCHOOL IN ZIMBABWE

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The study used a phenomenological approach guided by principles of the grounded theory approach to assess the impact of the Global Teenager learning circle on the educational life of students at Mucheke High School, in Zimbabwe. Since in grounded theory, 'theory comes from the data, the study explored, from students' point of view, how the integration of tele-collaborative learning projects can effectively promote new paradigms in classroom teaching and learning. The study offers guidelines for the effective implementation of this novel approach to the learning process, and discusses its wider implementations. The findings provide some advice to teachers wishing to attempt this instructional design strategy in their teaching. Although the findings are limited due to the small number of respondents, some of the findings are confirmed in the existing literature as well as contribute new findings to help expand the literature.

Key Words: tele-collaborative learning, collaborate, project based learning

INTRODUCTION

The potential impact of tele-collaborative learning projects in classroom has grown exponentially in the past two decades. Many researchers, have explored the potential for tele-collaborative since two decades ago (Dede and Palumbo 1991; Edelson et al. 1995; Ellis et al. 1991; Scardamalia and Bereiter 1994), but it has recently received a further boost with the increase in the numbers of technologically supported classrooms. This growing interest in network-based collaborative learning implies a need for more teacher knowledge about setting up and managing this type of collaboration between distanced school partners.

As Leask and Pachler (2001) have pointed out, there is a need for teachers to be technologically aware and competent.

A Tele-collaborative Project is an activity where students collaborate using the Internet to solve an information problem. Tele-collaborative projects can be done in any subject at any grade level. They include opportunities for integrating technology, exchange of information and development of critical and creative thinking to occur. It can be as simple as an exchange of email between children in different locations, developing a new web site on one's next classroom topic or it can be as ambitious as collecting original data from the ends of the earth to produce new knowledge and original insight into the nature of our world. Tele-collaborative learning broadens the teaching and learning environment, breaking down the walls of the traditional classroom and allowing the manipulation and global exchange of ideas and information. While early tele-collaborative exchanges were almost exclusively e-mail based, teachers now exploit a wide variety of communication tools including Multi-user Dimensions (MUDs), and Multi-user Object Oriented (MOOs), web-based message boards and videoconferencing to support student interaction. While videoconferencing, for example, may allow learners to see and speak to their partners in realtime, MOOs and discussion boards provide easy access to transcripts of the interaction which can facilitate reflection and further study.

As Pachler and Daly (2006) have pointed out, the social and psychological dimensions of network-based exchanges are highly complex and require adequate understanding of this complexity in order to properly facilitate learning through online collaboration. Many educators highlight the potential of the Internet for supporting constructivist teaching approaches because it requires exchanging and processing of information, that promote abstract thinking, can be used to focus on problem-solving as required by the constructivist learning processes (Fujike 2004; Leask and Pachler 2001; Warschauer and Kern 2000). The Global Teenager Project (GTP) learning circles are based on the theory socio-constructivism, which is the process of learning through, shared knowledge-building, a process which emphasises a joint effort of knowledge construction. Swan (2005:5) points out that "Social constructivism reminds us that learning is essentially a social activity, that meaning is constructed through communication, collaborative activity, and interactions with others." Understandably, along this line of shared knowledge-building, many authors and educators have begun to call attention to the potential of network-based tools as a means of

support for collaborative learning (Stacey 1999; Rogers 2000; Warschauer 1997). In particular, tele-collaborative projects provide excellent possibilities for elaborating student-centred, collaborative learning. This premise is based on the idea that network based learning can support and facilitate group interaction and group dynamics in ways that are not always achievable in face-to-face interaction. Through asynchronous, computer mediated, many-to-many communication, for example, online class discussions are claimed to be able to offer students opportunities that no other media can (Harasim, 1987).

Although the introduction of the Internet into the classroom has ushered in a new online learning paradigm, teachers do not have any assurance that this new delivery channel for teaching and learning will have a positive effect on our learners. This study sought to address the question of what students perceive as the value of this new teaching delivery method, as a way of providing information that could be used to improve the method. This information would help teachers to develop a better understanding of learners' feelings and their implications for this new teaching and learning modes.

What is the Global Teenager Project?

The Global Teenager Project (GTP) is an inter-classroom exchange of information and ideas. Originally established in 1999 by the International Institute for Communication and Development (IICD), the GTP aims to promote inter-cultural awareness by providing regular classroom debates in a safe structured environment. In addition to this, it aims to improve the quality of secondary school education (both formal and informal) by introducing schools to the exciting new applications of Information and Communication Technology (ICT). The project was introduced in Zimbabwe in 1999 at a school in Marondera, about 70km east of Harare the capital city of Zimbabwe. It was initiated by the International Institute for Communication and Development (IICD) and World Links for Development (WorLD) as the local partner. The IICD works with partner organizations in selected countries, helping local stakeholders to assess the potential uses of information communication technology (ICT) in development.

The mission of the GTP is to offer educational virtual exchange programmes to secondary schools worldwide, dedicated to promote cross-cultural understanding through new ways of learning, using ICTs. In particular, the GTP initiative seeks to achieve the following objectives;

- (i.) improve the education system by introducing young learner, especially girls, to relevant ICT applications to their day to day education;
- (ii.) promote intercultural awareness and sensitivity to opening up regular, lively classroom debates in a safe, structured environment, comprising learners from all over the world and
- (iii.) equip educators with basic ICT skills that will help them to transmit and share knowledge with learners, as well as measuring the reception of this knowledge.

The powerhouse behind the Global Teenager project is the 'Learning Circle' concept; brainchild of American educator Margaret Riel. Learning circles are temporarily learning environments that group an average of 8 classes in highly interactive online collaboration for an approximate period of 12 weeks. The GTP is characterised by two major initiatives, learning circles (English, French and Spanish) and Understanding Diversity. Both of these programmes provide learners with the opportunity to engage in project-based learning adapted to meet and fit with local curricula needs, collaborating with students from other cultures at home and abroad.

The learning circles are based on a simple yet effective thematic learning model which is project-based virtual exchange programmes that typically consists of eight to twelve classrooms connected through the Internet. Each class sponsors a question, which invites the other participants to provide responses and each session lasts for 12 weeks. During this active period each class in the learning circle responds to the questions sent by the other classes that make up the circle. The session then culminates in a 'Circle Publication' in which the findings of each class's research are published.

As has been established earlier on, the pedagogical concept underpinning learning circles is constructed around the principle of social constructivism. A learning circle allows for effective sharing and efficient transfer of knowledge anywhere and anytime, regardless of distance and the subject matter. It opens up a world of learning unavailable in most corners of the world, while at the same time empowering students with information technology awareness and skills crucial to succeed in today's global knowledge based economy. Every

participating class sponsors a project idea and presents it to the other members of the circle. The learning circle participants research and answer every project proposed in the circle and this is followed by discussions amongst participants which culminate into participants compiling and analysing responses received and producing a final online / hardcopy publication. In this way, an information learning line is woven into cross-curricular learning.

As a teaching strategy tele-collaborative projects can offer many benefits to students. Research studies show that online class discussion affords students a democratic environment (Hiltz, 1994). No one student or instructor can dominate a discussion. Less assertive or shy students feel less intimidated in participation of the discussion and feel more comfortable in expressing their opinions online (Kamhi-Stein, 2000; Warschauer, 1997; Yi & Majima, 1993). Many students reported that they had better communication with their teachers and peers in online classes than in traditional, face-to-face class discussions (Turgeon, Biase, & Miller, 2000).

However, it should be made clear that online collaborative activities are not designed to replace face-to-face communication, rather, they are designed to enhance the opportunity for discovering multi-perspectives and for knowledge sharing with other students outside the learner's everyday context. Harris (1999:55) recommended that curriculum based online collaborative work should have the goal to expose learners to:

- “differing opinions, perspectives, beliefs, experiences and thinking process;
- comparing, contrasting, and/or combing similar information collected in dissimilar locations;
- communication with a real audience using text and imagery; and
- expanding their global awareness”

In this model of teaching and learning, students make use of distributed expertise and a common pool of labour to achieve the learning goals. In relying on one another to complete their work, they encourage each other to articulate their knowledge and to clarify and extend their contributions. A very different form of relationship is found between the students and teacher. In this type of teaching and learning, the teacher acts as a mentor, overseeing students' work and providing them with guidance and experience. Designing, setting up and implementing these learning opportunities therefore requires that the teacher spends some

considerable amount of time and attention to prepare for effective learning.

How the GTP Learning Circle is Organised

The Global Teenager learning circles are highly structured and facilitated by class teachers with the support of a Circle Co-ordinator. The learning circle is carried out twice a year, that is, in February-March period and September-October every year. Groups of 8 to 10 classes from different schools all over the world are linked up via e-mail and a virtual campus to form a learning circle.

To ensure that students do not lose focus of their local curriculum standards learning circles are based on themes that are pre-determined by consultation of learners with their teachers. The classes select a theme from a shortlist of topics ranging from health, environment, human rights, globalisation and 'my life'. Learning circle partners exchange information on their selected topic using the following six-phase structured method:

- **Phase 1** (Week 0): Teachers prepare their pupils to take part in the Learning Circles and learn how to manage incoming mail.
- **Phase 2** (weeks 1-2): Students say "hello" to other Learning Circle schools using an open 'Class Letter' introducing themselves and their school.
- **Phase 3** (week 3): Students sponsor a question for the Learning Circle.
- **Phase 4** (weeks 4-6): Students answer the sponsored questions posed in the Learning Circle.
- **Phase 5** (weeks 7-9): Students reflect upon their thoughts, summarize, and send their final report.
- **Phase 6** (week 10): Students say "goodbye" to each other, the Learning Circle is formally closed.

Boxes 1 and 2 show examples of some of questions exchanged during Week 3 of a learning circle.

Box 1: Some examples of question sponsored to the learning circle

Hello (molweni, our special way of saying hello in Xhosa, one of the official languages in South Africa.)

Here are our five questions about our theme, Culture.

Is culture really as important as emphasised by the media.

1. Does culture stay the same or does it change over a period of year? Give reasons for your answer.
2. Does culture determine who you are?
3. Is it possible for one not to have a culture?

4. What is the main purpose of having a culture?

We will be waiting for your speedy reply. We are once more apologising for the delay in sending questions.

Should you experience problems in sending your letters to our email address please fax them to this number
.....

Box 2: Some examples of question sponsored to the learning circle

Hello friends

Our sponsored question is on Cultural Revolution.

In Zimbabwe elders are out-crying on the rate at which youths are losing cultural values.

1. What are the main aspects of your culture?
2. If any, which aspects have been dropped and state the reasons why?
3. Which aspects of your culture are being followed or reserved and why?
If there have been any marked changes in your culture, given a choice would you go back to your original culture or you would live in the present day culture. (State the reasons)

Key Notes

- a. Define "Culture" in your country's context.

In your answers do explain influences on culture

Interaction between classes takes place in a safe learning environment and is moderated. All communication is visible on the Virtual Campus website: www.iicd.org/virtualcampus. One of the key design features of the learning circle is the use of both synchronous (Chat) and asynchronous (email) to facilitate interactive and collaborative learning. The technology, particularly the Internet as a learning platform, plays an essential role in facilitating the exchanges on the learning circle, but it is not the focus of the activity. Students and teachers alike further learn about technology particularly the use of the Internet as a knowledge tool and the computer as a facilitative medium of allowing focussed learning.

These tools which formed part of the focus of the learning circle are used by learners to reflect on information presented in the learning circle topic of their choice. All exchanges work on the basis of class transmissions in which messages from one classroom are usually sent in one general file to the respective partner(s). After the introductory phase, these class transmissions occur about once a week.

METHOD

This study is a qualitative analysis of students' interaction and experiences concerning the tele-collaborative learning approach. The study used a phenomenological approach to understand how the students perceived the GTP learning circle. The participants were 14 students comprising of 8 female and 6 male students from an average age group of 12 to 14 years old. These students participated in a learning circle together with students from six other countries, namely Romania, Netherlands, South Africa, Ghana, Moldova and Uganda. In this study, convenience sampling was initially used (Strauss 1987), to determine the participants of the study. This meant that any participant who came forward and met the eligibility criteria was interviewed (Chiovitti 1997). Participants were recruited until theoretical saturation of data was achieved. Saturation is the point at which data replicates and no new information emerges from the interviews (Morse et al. 2002). This was achieved with 14 participants.

Two face-to-face taped interviews, using an interview guide, were conducted with each of the 14 study participants during their participation in the project. The first interview with each participant was exploratory in nature and involved open-ended questions. At the start of the study, participants were asked general open-ended questions, in order to abide by the grounded theory methodology stance of limiting the influence on participants of previous theoretical constructs of tele-collaborative projects (Strauss & Corbin 1990). The data collected helped to sharpen the focus of research in general and of the research questions in particular as demanded by the grounded theory methodology. A theoretical saturation of data was achieved with 14 participants. A tentative preliminary model emerged from the first round of interviews with each of the 14 participants. The second interview was used as an opportunity to affirm, modify, add, clarify and elaborate on what was said in the first interview. The questions added to the interview guide, which were based on the information introduced by participants during the first round of interviews, were effective in checking the content areas introduced and for verifying the emerging trends. The interviews were audio taped, and the taps were fully transcribed.

Taped interviews were transcribed on the left-hand side of the transcript page. Then the categories identified were transcribed on the right-hand side of the transcript. The data collected were transcribed and analysed immediately

after each interview. One reason for this practice is that in grounded theory methodology the incoming information from participants determines the information sought (Strauss & Corbin 1990). Constant comparison method of data analysis was used to analyse the data collected (Strauss & Corbin 1990, 1998). This was accomplished by constantly comparing new information with previously identified information (Carpenter 1995). This was to identify information that was repeatedly present and relevant to participants. All data were analysed through the process of inductive analysis thereby allowing ‘the patterns, themes, and categories of analysis to come from the data rather than being imposed on them prior to data collection and analysis’ (Patton, 2002:390). Thus, the interview transcripts were scanned for emergent themes. Information provided by participants earned its way into the theory when constant comparisons of data revealed the repeated presence of specific content areas in actual participant data.

Trustworthiness was the main evaluation criteria used to ensure the validity of the study, meaning how well the realities of the participants were presented. Trustworthiness of the study was maintained in several ways. The interviews were refined by the participants through a member check to make sure their meaning was accurately portrayed. Transcripts verifications of the interviews were reviewed through a peer audit to ensure their validity. The data (interviews, transcripts) reflected the constructed meaning of the participants.

The study was limited by the fact that it represented the unique experiences of secondary school students. However, much of what they experience support patterns seen in literature about higher education experiences.

RESULTS

This study sought to examine the experiences of the students while participating in a learning circle. The data collected from the participants are largely descriptive and exploratory in nature. This was intended to provide a rich source of information on the participants’ experiences with the learning circle. Through analysis of interview transcripts the researcher was able to observe and understand students’ perception of the learning circle. The findings of this study revealed three major themes with regard to students’ perception of the benefits of GTP learning circle. These have been grouped as follows:

- Learning through interaction with peers
- Learning through peers’ perceptions and different cultures
- Motivational function

Learning Through Interaction with Peers

In this study pupils indicated that the project had given them opportunities to exchange ideas and learn from their peers. Students reported that they enjoyed working with students from other schools. They mentioned that the students they worked with in the project had helped them think in new different ways. The pupils felt that tele-collaboration increased not only the number of ideas they generated but also the kinds and quality of ideas. The reflections that the pupils made on the entire learning circle revealed that they felt collaborating with pupils from another class helped them develop more creative ideas. As some students reflected,

It is very enlightening that we can share views with other students abroad. We are happy to be doing the very same project you are currently doing.

Student acknowledged that the Global Teenager learning circle has opened a new world of learning to them. It has provided them with a platform for collaborative learning experience which has improved their performance in class. One of the students had this to say;

In the learning circles, there is a lot of information which is helping us to excel in our schoolwork, especially Science and Geography.

In general, this GTP project was not only enjoyable but also pretty informative. In fact it can be used as a database for information since one can find information on many things such as culture that one cannot easily find in books.

Pupils found that working tele-collaboratively offered them a chance to learn from others. The pupils indicated that the project had given them the opportunity to learn from one another. As group members contributed to the interaction, pupils were able to obtain assistance in weak areas and provide help in their areas of strength. Pupils reported that lasting friendships were formed which continue long after the Learning Circle has ended. Several other students mentioned how they learned a lot from “meeting friends from different places in the world.” When asked what they had enjoyed most during the learning circle, two of the students said:

First of all, it was my pleasure to establish contact with others from all over the world through this project. This project allowed us to communicate with students from other cultures and learning their cultures.

It was a great pleasure for me to share some ideas with people from other countries. I was happy to learn about their ways of life, it was exciting for to talk about other ways of life throughout the world . .

Most the students saw the learning circle as a means of improving their work. When asked to reflect on their learning experiences students said:

We, as students from see Global Teenager as one of our breadbaskets for our daily learning. The questions from our learning circle partners were very challenging...so challenging that we were scratching our heads to find answers. The questions helped us to do our work with a goal to achieve.

All of the students expressed how much they liked the experience:

In my opinion, the project is very useful, especially for those of us who are interested in different cultures.

Generally, I want to let you know that, I am very glad to participate in such kind of a project. We have had a good exchange and it is beneficial that I am learning about the other cultures

Learning Through Peers' Perceptions and Different Cultures

Many students highlight the fact that they valued the opportunity the GTP learning circle brought them to connect with people from other countries and cultures. They were quick to recognize the value of alternative perspectives and to evaluate their own ideas against those of others. For example some of the students had this to say:

I enjoyed the little experience of other cultures, and I was happy because the project gave me a chance to explain the style of our dressing and I tried to change their views about us. By this way, I tried to explain ourselves and correct the wrongly known things in their minds

When asked about what learning opportunities they valued most during the learning circle, many students mentioned about their interaction with students from other cultures and testified that they had learnt much from the interactions.

We thank all schools who participated in the project with us for their insight. Your participation has enlightened our viewpoints on world culture. We look forward to participating in future learning circles with all of you.

Through the Chats and reading other people's opinion about things such as customs, norms, and cultural values have made me more conscious about the cultural differences. Thanks to the discussions I have read and participated in, I have become more knowledgeable about the cultural similarities and differences. I will make use of what I have learned in our discussions in life.

In particular many students mentioned that they learnt from the different points of views or perspectives from different cultures. Some of the students said:

"I liked being able to read responses from people from a different culture. It was interesting to see their point of view."

I think the project helped me a lot to broaden my horizons by gaining new perspectives and develop a sense of intercultural understanding

This project has given me the opportunity to see the views of people from different cultures about some specific areas such as child rearing, taboos, family rituals, religion, greetings, and so on. For example, in terms of child rearing, I have realized that in general, all cultures are aware of the fact that it is very important how you treat and train children

The same sentiments were echoed in goodbye email messages send by many of the classes involved in the learning circle. For example one class wrote:

Dear all,

We had some wonderful time here in this learning circle and we did gain good skills.

Thank you all for your Research Questions and Answers which made us think about others differently. Thank you again for answering our research question giving us some goods ideas about cultures around the world.

Yours

Hope to see you around in other LC and wish you all good luck and happy life.

CL13 (Class Code)

Many students also appreciated the sensitivity of their partners and they were also aware of the cultural similarities and differences. One of the participants commented that:

People in the discussion board are very sensitive and answer your e-mail immediately by stating different or similar opinions about their cultures

Another participant pointed out that:

It was really enjoyable to learn such cultural differences as well as cultural similarities

As a result, knowing these particular differences and similarities is very crucial especially for us as future leaders who live in the age of "global village" because we are always surrounded with different cultures and various languages in our life.

Motivation

The learning circle connected the classroom to the real world in a new and exciting way. The pupils felt that they did not only have the opportunity to learn from people they would otherwise not be able to meet face to face but also the fact that learning became fun too! One of the students pointed out that:

It was a real fun for me to participate in this project. That is, I really enjoyed learning about different cultures, which have different values, norms, ideas, perspectives. Within a limited time, I can say that I have learned different things.

The notion of being able to communicate and discuss ideas with a real audience that had a real interest in what was being written was also a great motivation for many of them. As one pupil put it, "I like chatting in the chatroom discussing our ideas the most".

The pupils also enjoyed the opportunity to "meet" other pupils who would normally not visit their classroom.

It has been nice learning from all of you. We enjoyed ourselves, we hope you did too! Goodbye!

All the pupils indicated that they looked forward to receiving email from the students from the other schools.

We think that GTP is a nice project. We have enjoyed the participation. May be till next year!

We wish to say that we have really enjoyed your company in this round of the Learning Circle Project. We wish to thank you for your patience and responses to our question. We wish those who fell along the line better luck next time. We thank also all the facilitators and coordinators for the good work they have done. Mr., thank you for your great encouragement.

This enjoyable and funny interaction was important as it laid the foundation for the co-operative processes of negotiation that occurred during collaboration.

DISCUSSION

The aim of this study was to determine how students perceived the use of the Global Teenager project as a teaching and learning tool. Interview findings demonstrated that incorporating tele-collaborative project in classroom teaching and learning encourage students to take an active role in their learning and makes subject learning more interesting. The Global Teenager Project learning circles provided participants with an opportunity for cultural exchange and a forum for students to become active learners. For the students, it is an opportunity for cross-cultural education, and a chance to engage in the learning process in a very different way from the experience in which most high school students engage. The learning circle experiences described in this study provided students with an opportunity to experience powerful learning experiences. According to Manson et al (2000) powerful teaching and learning goes beyond what would normally be accomplished in a traditional classroom, such as using technology in context and having integrative opportunities demonstrated.

There is evidence to support the claim that tele-collaborative learning projects create a democratic information exchange platform for all participants (Schallert et al, 1996). By democratic, it is meant that the online space seems to provide an arena for participation by all members. Bump (1990) and Hiltz (1986) argue that online space provides a level play field that can generate an equitable participation between the teachers and the students where the teacher does not dominate the discussion.

Pupils learn about teamwork and writing quality may improve because the strengths of the group are pooled. Weaknesses in an individual's writing can also be reduced because of revision and group work often motivates pupils (Hernandez, et al. 2001). In addition, most of the topics of discussion were relevant to the students and many of them were very motivated to contribute thoughtfully to the discussion as evidenced from the discussion above. Even the writing process was reinforced in this on-line learning context; teachers noticed

during one learning circle that students made an extra effort to re-read/re-write their submissions (and even spell check their work). This was probably because teachers would always mention to their students that their learning circle partners were looking forward to seeing their best. This responsibility factor motivated a lot of the students to engage in this active and thoughtful learning process.

In the constructivist model that underpins the GTP project, learning is viewed as the result of mental construction. Students learn by fitting new information gained from interacting with objects and events, with what they already know. Typically, learner autonomy and initiative is accepted and encouraged. Constructivist approaches present learning as a social process that takes place through communication with others (Mead, 1934). The learner actively constructs knowledge by formulating ideas into words and these ideas are built upon through reactions and responses of others (Bunton and Garth 1983; Alavi 1994). In other words learning is not only active but interactive too!

Implications for Teaching and Learning

The results of this study demonstrate that there is a place for tele-collaborative learning projects in our classrooms. When tele-collaboration is successfully implemented in a pedagogically sound learning context with genuine interaction between participants, it can lead to a very fruitful journey. The GTP livens up the whole teaching process as teachers incorporate new ideas and methods into their classes. From the teaching standpoint, the learning circle is an opportunity to involve students in an authentic learning environment with colleagues from a different part of the world and engage in 'cutting edge' work. Tele-collaborative learning provides a space where students can feel a sense of belonging and are able to share and construct knowledge together.

Interaction has long been a defining and critical component of the educational process, and it has been suggested that asynchronous interaction may provide an ideal environment for learning. Promoting interaction requires rethinking of traditional learning and teaching roles, informed by research into learning and teaching activities, and the outcomes of such interaction. The GTP builds on the premise that the web medium can allow a seamless interaction among learners. The better model is more like exploration, in which the teacher helps students to determine the topic and activities. The teacher's role will then be to encourage substantive interactions among students, monitoring, and shaping conversation, and promoting an atmosphere in which students can respond to one another's work. This model results in more dialogue and is far more likely to be constructivist, and builds on the rich learning that takes place in groups. Unlike most school learning, in this model students are given the chance to actively

formulate and articulate an understanding of the issues under discussion. Students identify on their own any patterns, relationships, causes and effects from their own perspective. To me this sounds more like empowering the learners.

The global teenager project can provide a promising strategy for fostering dialogue, increasing interaction and collaboration as well as enhancing learning for marginalised students. Teachers should encourage students to be engaged in a social negotiation and collaboration, by contributing to the information exchange. Contributions might include reflection on current practice, sharing a good idea, peer review of other comments, etc. As Riel (1999) puts it, "Technology is shared minds made visible. Harris (2002) says, "If superior educational benefits for tele-collaborative learning activities are perceived clearly by teachers making instructional choices on behalf of or with their students, tele-collaborations will flourish." This will only be when technology is harnessed to allow pupils to work together to arrive at common understandings, thereby making the computer truly become a space for making shared minds visible. That is the whole point of tele-collaboration.

Tele-collaborative learning, as seen in this study shifts the traditional teacher/student roles and thus has the potential to change the traditional classroom discussion to exploratory talk. Tele-collaborative learning is a challenge to the teacher-centred didactic approaches where the teacher transmits knowledge to learners because the online medium has the potential to be learner centred and participatory (Wade and Fausle 2004). Another added value of the Learning Circles is that they do not impose content on anyone. The content is formed by the participants themselves and as such reflects local contexts. Teachers and their students can experiment with different and exciting new approaches to both learning and teaching, sharing their findings with other schools.

While in some ways this project is a very different experience for many and students, there is no magic involved. Both the teacher and their students need to work very diligently to make this project a success, and in some cases it may require more thought and creativity on the parts of the teacher to do this sort of project well.

CONCLUSION

The Global teenager project has been quite successful in mainstreaming tele-collaborative learning projects. The most basic premise from which all tele-collaborative learning should begin is the goal to build a learning community and facilitate the exchange of ideas and information among the members of the

community. Overly, students' experiences of this new teaching and learning method showed a positive perception of how tele-collaborative learning is benefiting the students. Students are given a solid grounding in critical thinking, teamwork and independent learning, using ICT media. By using tele-collaboration, classroom instruction, curriculum objectives and technology can be blended in a meaningful way. Although technology plays an essential role in Learning Circles, it is not the main focus of the project but is one of the added values of participation. The technology is a means to an end. It will help students collaborate alongside teachers in a global virtual classroom.

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