Teachers-librarian collaboration in building the curriculum for an IB World School: A case study

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Many schools are in the transition stage from passive learning environments into active ones. Teachers, librarians and administrators are forced to rethink the curriculum in terms of content and teaching methodology because of advancement of technology and competitions. The paper will demonstrate the need of collaborative work of teacher-librarians and class room teachers. It will analyse the need of students and faculty for viable information skills offering librarians a new entrée into the classroom curriculum. Librarians are designing a variety of outreach programs to work more closely with teachers to integrate information skills into the curriculum. The paper will present a case study of a structured collaborative program which is working effectively in an IB World School in India.

Shift from passive learning environments

In passive learning environment "students are assumed to enter the course with minds like empty vessels or sponges to be filled with knowledge" (McManus, 2001). In active learning environments "the instructor strives to create a learning environment in which the students can learn to restructure the new information and their prior knowledge into new knowledge about the content and to practice using it" (McManus, 2001). Passive learning represents listening to the teacher, looking at the white/black board/overhead or slide and reading from a text book. "Engaging students in doing something besides listening to a lecture and taking notes to help them learn and apply course material. Students may be involved in talking and listening to one another, or writing, reading and reflecting individually" (McKeachie, 1998).

Recent research suggests learning is fundamentally influenced by the context and activity in which it is embedded (Brown, Collins and Duguid, 1989). There is a significant shift away from the typical classroom overhead teaching, beginning with facts, ideas and then moving to applications. Active learning frequently begins with problems, for which students work through information seeking strategies to find the solutions to the problem and learning en route. They simply do not take in new information and ideas; instead they create something new with the information ideas. They construct their own meanings or create something while processing the available information intellectually. In passive learning environments students are distant observers of questions and answers whereas in active learning environment, students become immediate practitioners developing higher order thinking and problem solving skills. There is a radical change in terms of technology advancement and its availability to students which has called upon immediate attention of the teachers, librarians and administrators of schools. In the era of development, change and competition, there is a compelling need to rethink the requirement of redesigning the curriculum.

The Ws of collaboration: What is "collaborative learning?"

In education, collaboration reflects a shifting philosophical view about the importance of working together to improve learning. Teachers previously isolated in classrooms (Oberg, 1990) and teaching autonomously (Leonard, 2001; Houston, 1980) must face the complexity of teaching 21st century students, many of whom need basic resources, native language instruction, and greater access to information and services. Collaboration is perceived as a way to address these needs by creating opportunities for interaction between and among educators and those being educated (Dewey, 1963; Piaget, 1929; Burner, 1968; and Vygotsky, 1978). Through collaborative interaction, an environment develops where teachers and learners feel socially engaged (Dewey; Vygotsky) and democratic principles are supported.

Efforts to share responsibilities in education through collaborative practices represent an attempt to transform education into a community of learners (Little, 1982; Leonard & Leonard, 2001; Pugach & Johnson, 1995) where each member is considered capable of achieving academic success. Diversity among learning backgrounds and styles of students are challenging to classroom teachers and helps them understand better when students work together. "Study groups emerge in learning communities, both intentionally and spontaneously. These programs provide a unique social and intellectual glue for students that results in high

rates of student retention, increased student achievement and more complex intellectual development" (MacGregor, 1991). Web 2.0 tools have become very effective instruments of collaboration in IB World Schools. Jeff Golub points out, "collaborative learning has as its main feature a structure that allows for student talk: students are supposed to talk with each other…. And it is in this talking that much of the learning occurs" (Golub, 1988). It produces an intellectual synergy of cumulative minds working on the same problems looking at it from many perspectives. This often leads to a better understanding and construction of new meanings of the problem in question. It also invites the students to build closer connections to other students and faculty in the course of learning. Students do come across differences which help them build capacities for tolerating or agreeing to the group voice. This cultivates teamwork; community building and leadership skills are honed. Students also foster the habit of participation and a sensitive ear in hearing others which are very strong components of a democratic and civic life.

What is collaborative planning and teaching: teacher-librarians and classroom teachers
The results of a study by the Library Service Center of the Colorado State Library offer the most recent support for library media specialists (LMS) and teachers working collaboratively. The study concludes that test scores increase as school librarians spend more time collaborating with and providing training to teachers, providing input into curricula, and managing information technology for the school (Manzo, 2000). A significant number of prior studies also indicate a positive relationship between the library media program and academic achievement. Didlier (1984) examines 38 of these studies, including Gaver's (1963) study of the impact of elementary library service on test scores; Graves (1974) research on the effect of library service on the academic achievement of high school seniors; and Snider's (1965) investigation of the relationship between college success and knowledge of information skills.

Collaboration is based on shared goals, a shared vision, and a climate of trust and respect (Muronago & Harda, 1999). Each partner fulfils a carefully defined role; comprehensive planning is required; leadership extends over a relatively long period of time (Callison, 1999). The teacher brings to the partnership knowledge of the strengths, weaknesses, attitudes and interests of the students, and of the content to be taught. The media specialist adds a thorough understanding of information skills and methods to integrate them, helping the teacher to develop resource-based units that broaden the use of both resources and teaching time, integration of educational technologies, and a reduced teacher/student ratio (Doiron & Davies, 1998). Teachers with experience in collaborative planning and teaching view the role of the LMS more positively and welcome continued collaboration. Participants believe that the results of the collaboration are more powerful and significant than the results of their individual efforts (Friend & Cook, 1996).

Why collaborative planning and teaching?
Collaborative planning and teaching empowers the educators to make a positive impact on student learning. Teachers and teacher-librarians get opportunities to work and connect with each other in meaningful ways by enhancing student achievement which is the basic goal of any educational institution. Teacher-librarians get a new entree into the classroom curriculum. Librarians are designing a variety of outreach programs to work more closely with teachers to integrate information skills into the curriculum. "One of the biggest roles that teacher librarians have is to ensure that information literacy strategies are embedded across the curriculum. These outcomes must be taught to all students through the development of an effective collaboratively planned information literacy program. Added to this partnership is the student learner in a constructivist method of collaborative planning" (Loertscher, 1998).

From isolation to collaboration
As schools transform from passive learning environments to active ones, the roles of school librarians have, or are, expected to be transformed radically. Moving beyond circulating resources in isolation, the electronic age school librarian takes on the role of information consultant. Suggesting resources, locating and acquiring needed materials, recommending strategies, teaching use of technology connecting it to the curriculum and instructing students and teacher in optimal information seeking methods make the librarian an important component in curriculum development. "Many traditional tasks may be assigned to clerks, leaving the professional free to work directly with students and teachers" (Craver, 1994).

Librarians assist teachers and students to search out their information needs, critically evaluate the materials they locate, and use technological means to synthesise their findings into new knowledge (Brown, 1990). The term 'collaboration' is one of the most frequently used terms in *Information Power: Building Partnerships for Learning* (Callison, 1999). 'Instructional consultant' has been upgraded to instructional and curriculum 'partner', reflecting a collaborative relationship where the teacher and library media specialist are viewed as equal contributors (Muranaago & Harda, 1999). Successful collaboration and student learning are considered parallel and are based on leadership and technology.

Curriculum development and collaborative planning and teaching
If one conceives of the curriculum development process as consisting of three major stages -planning, implementation and evaluation- the stage at which the media specialists enter will obviously affect the character of contribution. Some of the research studies describe the extent of involvement of media specialists in curriculum development and factors related to it.

Madaus (1974) investigated a number of factors conceivably related to a successful library media program in Texas high schools. Among the variables were the extent of the librarian's curriculum involvement, librarian personality factors, and teaching structures available, (e.g. language labs, teaching machines, team teaching, flexible scheduling). Madaua defined a successful program by the amount of materials circulated. The best predictors of high material circulation were a high extroversion score on the personality inventory and a high degree of involvement in curriculum on the part of the librarian. School librarians differed significantly as a group from librarians measured in Douglass's (1957) landmark study, which recorded many negative characteristics. School librarians surveyed by Madaus were more extrovert, more sociable and demonstrated fewer neurotic tendencies.

Aaron (1973) developed and tested a model which assigned the library media specialist an active instructional development role on the school's teaching team.

Loertscher (1988) outlines eleven levels of school library media specialists' involvement with curriculum and instruction. This spectrum of roles is divided into three general categories: solid warehousing services, direct services to teachers and students, and resource based teaching, the greatest professional involvement occurring in the latter. At the bottom of Loertscher's scale, the library media specialist has no involvement. At level eight, scheduled planning in support role, the library media specialist begins limited involvement with curriculum planning. Finally, at level 11, curriculum development, the library media specialist is an integrally involved curriculum consultant.

Eisenberg and Berkowitz (1988a, 1988b) asserts that library media specialists' roles are becoming redefined due to technology, the 'information explosion', a renewed emphasis on lifelong learning skills, and an increasing acceptance of additional responsibilities by library media specialists. They outline present and define a broad view of the curriculum role of the library media specialists as an interrelationship among five areas of responsibility:

1. Resource provision
2. Reading guidance and literature appreciation
3. Information service
4. Curriculum consultation service
5. Curriculum development

They summarise the curriculum development role as one which includes " the articulation of purpose, goals, objectives, clearly stated learning outcomes, and sound research based approaches to achieving (curriculum-related) goals" (Eisenberg & Berkowitz, 1988a, p.97). This definition is as applicable to any content area as it is to the school library media instructional program, and it is equally acceptable to teachers and administrators.

Case study

A quiet revolution has engulfed the educational institutions overpowering them to transform themselves from passive to active learning environments. It is the new technological development which is rapid and radical and is magnetic in nature. It has created nostalgic competition to follow it. The student community is highly influenced and is radarless of its optimum use as a tool for academic learning. It's the role of the educators to integrate learning opportunities within the curriculum by using technology.

> In schools recently networked and upgraded for extensive technology use, the entire staff understands that the immense investment is only worthwhile if it translates into improved learning opportunities-and that key people make it happen! (Loertschr, 2000, p.5).

> No other concept of the role of the library media center program is more central or more vital to its success. Research of library media program draws the conclusion that collaborative planning is a strong link to achievement of learners. Collaborative planning turns the library media program and technology program from passive to active school initiatives. Judging by the amount of money required to build and maintain viable LMC and technology programs, a passive progression is simply unacceptable (Loertscher, 2000, p.26).

G.D.Goenka World School, India, is an International Baccalaureate school following Primary Years Program (K-5) and International Baccalaureate Diploma Program (K-12) levels. School community has access to extensively rich technology environment for teaching and learning. In the year 2007 library curriculum was created based on research skills and library use instruction. Student responses were evaluated through assignments created by the LMS. Gradually based on teacher's input these assignment incorporated research skills useful for the units being taught in the classrooms. After observing increased student interest, LMS approached faculty members to understand the weaknesses and strengths of the student learning which received enthusiastic response. LMS provided them with solutions and that was the onset of collaborative planning and teaching.

Other elements which sparked the inspiration to plan, collaborate and teach ascended from professional reading, association with international professional networks, visits to various schools in many countries and much learning came from other practitioner professional partners around the world.

A collaborative planning and teaching form was created (Appendix 1) and floated to PYP faculty. There were questions and criticism of increased work load, but endurance and patience and interpersonal skills worked well. The forms were returned via mail and the LMS's work started. Resources appropriate for the Unit of Enquiries were located and included on the forms along with a suggested information literacy project. The second meeting with the teachers yielded better understanding with each other and pathways were paved. Instruction and research started by the LMS, teacher and students meant greater student learning was achieved.

The process evolved dynamically and was better structured and called for connection with other departments such as information technology (IT) and Art. Structured research became part of the program and resulted in a scheduled time slot for collaborative planning with the LMS. Now many departments are learning laboratories for each unit happening in classrooms. In 2009 faculty members were given a tutorial on using Web 2.0 tools by the LMS and first PB wiki was launched. The IT teacher took over to train students of Grades IV and V in using wiki (http://gdgws.pbworks.com), making podcasts, creating a newsletter on Microsoft Publisher based on the unit in progress "South East Asia". (Appendix 2)

At the back drop of this tremendous success, collaborative planning and teaching, orientation presentation http://docs.google.com/present/edit?id=0ATzjWb03Qgp3ZGNnZ3d3bV8zZm05azJ0aDg&hl=en, created a stir among Middle and Senior school faculty. Another collaborative learning wiki http://gdgwsibdp.pbworks.com for English A1 was launched, which is evidence of high value result in the form of student learning.

Strengths of the CPT
- Optimum use of expertise of human resource.
- Optimum use of library resources.
- Evidence based increased student achievement.
- Information literacy incorporation among student community.
- Team and leadership qualities incorporation among students.
- Better understanding and bonding among whole school community.
- Increased ICT levels.

Weaknesses of CPT
- If not defined, responsibility is likely to be shifted.
- If there is no provision for a flexible time table, the librarian may not be able to give quality results.
- If inadequate staff, an effective program may not be able to take off.
- If management is not supportive, collaboration may not be able to take place.

Strategies school librarians can use for successful CPT

Collaborative planning requires making the time to work and learn with colleagues. The most effective way for school librarians in India is suggested as below:
- Be involved in the planning of teaching units to facilitate curriculum delivery.
- Ask for flexible time for effective CPT.
- Train semi skilled staff for books circulation.
- Use technology for library operations.
- Support teachers in the implementation of the information literacy outcomes of those units.
- Assist students to develop and consolidate their information literacy skills so they can be effective and efficient users of information in the future.
- Provide appropriate resources in a variety of formats for staff and student use.
- Build professional development days into the school calendar that are set aside for collaborative planning.
- Ensure that faculty; team, department, and grade-level meetings are opportunities for collaborative planning and learning rather than meetings focused on administration and management details.

It is imperative that school library media specialists are proactive and develop CPT skills. Dr. Haycock (1999) notes that collaborative program planning and team teaching are complex evolutionary changes which require time - perhaps two to five years to reach effective levels.

References

Aaron, Shirley L. (1973). A perspective model illustrating a method of developing a flexible staffing pattern for professional school library media center personnel based on their instructional role in school. Ph.D. diss., Florida State University.

Brown, J. (1990, September-October). Navigating the 90's- the teacher-librarian as change agent. *Emergency Librarian*, 18 (1), 19-28. (EJ 415352)

Brown, J.S.A. Collins, and P.Duguid. Situated Cognition and the culture of learning. *Educational Researcher*. 18 (1), 1989. The National Institute of Education, U.S. Department of Education

Bruner, J.S. 1968. *Towards a theory of instruction*. New York: W.W. Norton.

Callison, D.(1999, January). Keywords in instruction: Collaboration. *School library media activities monthly*, 15(5), 38-40

Craver, K.W. (1994). *School library media centers in the 21ˢᵗ century: Changes and challanges*. Wesport. CT: Greenwood Press, (ED377871)

Dewey, J. (1963). *Experience and education*. New York: Collier Books. (First published 1938)

Didlier, E.K. (1984). Research on the impact of school library media programs on student achievement: implications for school library media professionals, (ED 279 340). In MacDonald, F.B. (Ed). *The emerging school library media program* (pp. 25-44), Eaglewood, CO: Libraries Unlimited.

Doiron, R., & Davies, J. (1998). *Partners in learning: Students teachers, and the school library*. Englewood, CO: Libraris Unlimited. (ED417721)

Eisenberg, Michael B. And Berkowitz, Robert E.(1988a.) *Curriculum initiative: an agenda strategy for library media program.*

Eisenberg, Michael B and Berkowitz E. (1988b). *Resource companion for curriculum initiative: an agenda and strategy for library media programs*. Norweed, NJ: Ablex publishing Corp.

Friend, M., & Cook, L. (1966). *Interactions: Collaborative skills for school professionals*. (2nd ed.). White Plains, N.Y: Longman. (ED 340688)

Gaver, M.V. (1963). *Effectiveness of centralized library service in elementary schools*. (2nd ed.). New Brunswick, NJ: Rutgers University Press.

Golub, J. (Ed) *Focus on collaborative learning*. Urbana, IL: National council of teachers of English, 1988.

Haycock,ken. (1999) Fostering collaboration, leadership and information literacy; Common behaviors of uncommon principals and faculties. *NASSP Bulletin*, 83 (605), 82-87, (EJ585580)

Housten, W.R. (1980). Collaboration-see "Treason." In G.E.Hall, S.M.Hord, & G.Brown (EDs.), *Exploring issues in teacher education: Questions for future research* (pp.327-410).

Leonard, P.E.& Leonard, L.J. (2001). The collaborative prescription; remedy or reverie? *International journal of leadership in Education,* 4(4), 383-399

Little, J.W. (1982). Norms of collegiablity and experimentation. *American Educational Research journal*, 19(3), 325-340.

Loertscher,David (1998). *Re-Inventing your school library in the age of technology*. Pg. 5., 11.,26.

Loertscher, David (1988). *Taxonomies of the school library media program.*

MacGregor, J. (1990). Collaborative Learning: Shared Inquiry as a process of reform. In M.Svinicki, (Ed.) *The changing face of college teaching. New Directions for teaching and learning*, no. 42, San Francisco: Jossey-Bass, 1990.

Madaus, James R. (1974). *Curriculum involvement, teaching structures, and personality factors of librarians in school media programme.* Ph. D. Diss., University of Texas at Austin.

Manzo, K.K. (2000, march 22). Study shows rise in test scores tied to school library resources. *Education Week on the Web.* Retrieved 16 June 2010 from http://www.edweek.org/ew/ewstory.cfm?slug=28libe.h19

McKeachie, Willbert J (1998). *Teaching tips: Strategies, research and theory for college and university teachers.* Houghton-Mifflin.

McManus, Dean A (2001). The two paradigms of Education and the peer review of teaching. School of Oceanography and Center fo Instructional Development and Research, University of Washington; in the *NAGT journal of Geoscience Education*, Vol. 49, No. 6, Nov. 2001, pp. 423-434

Muronago, K., & Harda, V (1999, October). Building teaching partnerships: The art of collaboration. *Teacher Librarian,* 27 (1), 9-14

Oberg, D. (1990). Cooperative program planning. At what cost? *School Libraries in Canada*, 11(1),7-10

Piaget, J. (1929). *The child conception of the world*. New York: Harcourt, Brace& Company.

Pugach, M.C. & Johnson, L.J. (1995). *Collaborative practitioners: Collaborative schools*. Denver, Co:Love

Snider, F.E. (1965). *The relationship of library ability to performance in college*. (Doctoral dissertation, University of Illinois, 1965)

Vygotsky, L.S. (1978). *Mind in society.* Cambridge, MA: Harvard University Press.

Bibliography

http://www.libraryinstruction.com/teachers.htm This webpage is a copy of the ERIC Digest, teachers and Librarians: Collaborative relationships published by the US federal government. ERIC Digests are in the public domain and may be freely reproduced and disseminated.

G.D.GOENKA WORLD SCHOOL
LIBRARY MEDIA CENTER
LIBRARIAN-TEACHER COLLABORATION PLAN SIGN UP SHEET

TEACHERS:_____Sonia Juneja, Komal and Surbhi
 Grade II
 Time Period: Jan-Feb'09
_____

SUBJECT_____**Social Sciences**
—_____

UNIT NAME_____**Community Helpers**
_____

LEARNING GOAL__To make my children aware of the the people who help in running community successfully and their responsibility/ contribution towards it.
_____

WHAT RESEARCH SKILLS THE TEACHER WANTS TO INCORPORATE FOR THIS POI? PLEASE MARK THE RELEVANT SKILL/SKILLS
  • **ASKING QUESTIONS**
  • COLLECTING INFORMATION
  • **PROCESSING(browsing, observing, skimming and viewing) INFORMATION**
  • COMMUNICATING/ ORESENTING INFORMATION
  Students will incorporate Library skills such as:
       1. **Locating resources on the topic C/H.**
       2. **Learning Dewey Decimal Number of C/H**
       3. **Learn to identify Author and title of the books.**
       4. **Method of writing style of author name.**
       5. **Learn about Fiction and Non Fiction Books.**

DATES ON WHICH THE TEACHER WOULD LIKE TO BRING THE CLASS TO THE LIBRARY APART FROM THEIR REGULAR LIBRARY CLASS.

MONTH	1ST WEEK	2ND WEEK	3RD WEEK	4TH/5TH WEEK
AUGUST				
SEPTEMBER				
OCTOBER				
NOVEMBER				
JANUARY			½ library 35 min. each	½ lib. class
FEBRUARY	½ library class	½ library class	½ lib. class	½ library class

RESOURCES AVAILABLE:
PRINT:_____
_____

_____
_____
_____ _

ELECTRONIC_____
_____
_____
_____

WEB SITES__http://www.abcteach.com (for classroom teacher and the librarian)
_http://www.hud.gov/kids/job1.html____(home work assignment and practice at IT)
_____http://www.educ
ation-world.com/a_tech/sites/sites054.shtml_____(Interesting lesson plan for the classroom
teacher)_____ ____http://teacher.scholastic.com/commclub/_____(wonderful
interactive web site for practice thee unit)

_____
_____
_____
_____

IL PROJECT OFFERED BY THE LMC HEAD
- **Show PPT in Library time. Students learn about people who work in their neighborhood. They choose to be what ever they want to be if given a choice. Librarian prints pretty badges with the students name on it and gives it o the students who wears it during unit teaching. http://teacher.scholastic.com/commclub/**

- **Librarian helps discover Dewey Number for C/H**
- **Librarian explores all resources available on C/H and organizes structured reading for F and N/F print resources in library time. Minimum 3 N/F and 2 F**
- **Librarian teaches to write Author and Title of the books read.**
- **Librarian and class room teacher organize quiz on C/H.**
- **Librarian puts up Bulletin Board on C/H out side the library for two weeks.**

ANY CHANGES DESIRED BY THE
TEACHER:_____
_____
_____
_____
_____

- Bulletin Boards: Who wear these hats? And can you name?
- Assessment quiz would be based on the Bulletin boards information.
- Send the web sites to IT department as well to incorporate IT skills.

FINAL PROJECT TO BE PUT ON THE SERVER TO BE ACCESSED BY STUDENTS

GENERAL LEARNER OUTCOMES (GLOs) AFTER THE PROJECT IS COMPLETED AND
SUBMITTED.

NOT SATISFACTORY   SATISFACTORY   GOOD   EXCELLENT

LMC HEAD:

APPENDIX II

SOUTH EAST ASIA

NAME AND GRADE--

Research skills Approach

1.Task Definition: LEARNING TO ASK QUESTIONS ABOUT GEOGRAPHY AND CLIMETIC CONDITIONS OF SOUTH EAST ASIA.

Students will learn to use Question Stems and create key words to find information from Internet and print resources.

Question Now using following question stems:

Why_____

What_____

Where_____

How_____

When_____
Compare_____

Select one question to research and present Information.

My Question is_____

2. Information seeking strategies:
Circle the sources that you may want to use:
Internet   books   encyclopedias   Videos
Location and Access:
Write down the website addresses and the date of visit:
For Example:
http://www.enchantedlearning.com/subjects/plants/June 15th 2008
_____

_____

_____

Titles and authors of the books used for research:
Author's Last name, First name, Title of the book.
For example:
Overbeck, Cynthia. Lands and people of Singapore._____

_____

_____

4. Use of information:
Use the information to make notes for your inquiry.
What is the role of tourism in the economy of South East Asian countries?
_____

_____
_____
_____
_____
_____
_____
_____

Read, think and write down your findings.

Compare Climate of the two South East Asian countries and find how it has influenced the lives of its people?

_____
_____
_____
_____
_____
_____
_____
_____
_____

Use the information to make notes for your enquiry.

 INTERESTING FACTS TO SHARE

_____
_____
_____
_____
_____
_____
_____

5. SYNTHESIZE AND ORGANIZE ALL THE INFORMATION AND PRESENT THE RESULTS.

I WILL PRESENT MY INFORMATION IN A:
(PICK ONE)
NEWSLETTER
BOOKLET
POWER POINT
STORY

6. REFLECTION:
1. How can I make best use of the climatic and geographical conditions of my country?

_____
_____
_____

_____
_____

2. Did I write neatly and present my project the way I expected?

3. Did I try my best?

4. Did I stay on task and work independently?

5. What will I do to make my next research inquiry better?

SOUTH EAST ASIA RESEARCH RUBRIC

Criteria	4	3	2	1
Understanding of the task	Excellent understanding displayed	Good understanding displayed	Basic understanding displayed	No understanding displayed
Understanding of their chosen inquiry	Excellent understanding of their chosen inquiry	Good understanding of their chosen inquiry	Basic understanding of their chosen inquiry	No understanding of their chosen inquiry
Collection and recording of information	Collection and recording of information was excellent	Collection and recording of information was good	Collection and recording of information was basic	Not collected and recorded any information
Planning and organization of presentation	Planning and organization of presentation was excellent	Planning and organization of presentation was good	Planning and organization of presentation was basic	No planning and organization of presentation
Content of presentation	Presentation contained significant information	Presentation contained Important information	Presentation contained some relevant information	Presentation contained No relevant information

OTHER COMMENTS:

Statement of Originality

This statement certifies that the paper above is based upon original research undertaken by the author and that the paper was conceived and written by the author(s) alone and has not been published elsewhere. All information and ideas from others is referenced.