Small Group Teaching in Library and Information Science

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Introduction

Student learning is one of the primary goals of universities. Suitable student-oriented teaching methods can help motivate students and help them realize their potential. One of these methods is small group teaching. It is student-centered and the tutor plays the role of facilitator (Bakhtiyar Nasrabadi, Norouzi, 2003). This method is being used and evaluated in a number of disciplines. Trinity University, in Ireland, for example, has done research that examines the purpose of small group teaching in 30 different majors (Small Group Teaching, 2003). LIS is not one of these 30. Fattahi (2000) says that, "educational programs in library and information science have not a firm theoretical base corresponding to new educational methods. In most cases the goal is transmitting information and skills to the students and the successful students are those who can remember information without changes. We could not develop critical thinking and analytic view in students". Hoseinikhah (2005) considers LIS education a teacher-oriented model which makes students inactive.

This article examines types of small group teaching that can be used in LIS, including wide-ranging methods, responsibility of students and tutors, and advantages of using small group teaching in LIS. Approaches to facilitating this method are discussed.

Literature Review

Small group teaching is an accepted educational methods that is used in many universities. The Chinese University of Hong Kong is one that puts emphasis on small group teaching and states that since faculties and departments tend to emphasize specialized teaching and lectures, the mission of the new colleges should be the provision of general education through small class teaching and learning, including seminars and tutorials (Final Report, 2007).

Gross Davis (1999) asserts that if students are to be able to apply theoretical knowledge to real-world problems, or demonstrate decision-making or problem-solving skills, it may be appropriate to include group work in the design of a course.

The advantages and disadvantages of this method for different majors have been evaluated. Springer (1997) states that various forms of small-group learning are effective in promoting academic achievement, better attitudes toward learning, and increased persistence in science and technology programs

There is little literature on small group learning in LIS. Agade (1998) says that few guidelines exist for integrating collaborative skills in LIS education. He suggests that collaborative learning strategies can be integrated into LIS curricula and are especially necessary in management and reference courses. Radford and Bryce (1984) describe small group learning in an LIS school bibliographic and computer laboratories.

Small Group Definition

Small group teaching has a long history, perhaps going back to Socrates. It did not emerge in systems of mass education until the 19th century, but the goals of critical thinking and intellectual development are perennially relevant. In this method, students discuss issues in small groups, supervised by the teacher. The advantages include better communication skills and intellectual and professional development (Brown and Atkins, 1988). Other advantages include increased participation by students, deeper and longer-lasting understanding, and more motivation to learn independently (Gross Davis, 1999). Particular methods such as buzz groups, snowball groups, and crossover groups have been used to improve effectiveness (Final Report 2007).

Small group teaching also has disadvantages. It is time-consuming and may be difficult to grade or evaluate. Some students may resist (Svinicki, n.d.). Small group teaching must be used while paying heed to teacher and student roles and responsibilities, finding ways to alleviate its weaknesses.

Classification of Small Group Teaching

Brown and Atkins (1988) divide small group teaching in three categories. Their categories are tutorial, seminar and problem solving classes.

Tutorial classes focus on individual development. Tutorials use a "trigger" to encourage discussion (Types of small group event, 2007). Seminars are appropriate for a larger topic. Group members divide responsibility for the material and present it to the group (Price, 2003). Problem solving classes help students use data to solve a problem. Tutorials often have a group of up to 5, while seminars have 8 to 20, and problem-solving classes up to 30 (Brown and Atkins, 1988).

Problem solving classes, as it is clear from its name, enables students to obtain guidance and practice in utilizing data and other information to solve the problems. It contains up to 30 students (Brown and Atkins, 1988).

Methods of Small Group Teaching

As mentioned, three small group teaching methods are buzz groups, snowball groups, and crossover groups.

In "buzz groups," students are assigned to groups to discuss a topic or complete an assignment within a short space of time, about 10 to 20 minutes. This method could be useful for LIS students in cataloging, classification, abstracting, indexing, and serials courses. None of students can complete the assignment alone, and they must cooperate in their groups. It would also be useful in theoretical subjects such as history and philosophy of LIS, giving students the opportunity to debate. These discussions generate topics to be followed up later. This method is useful when:

- It is a relatively large class and the teacher would like to have discussion
- The teacher wants to encourage participation from students reluctant to speak in larger groups (Safavi);
- The teacher would like to get to know students better;
- Students would like to compare their understanding and progress with others (Jaques, 2003).

"Snowball groups" are an extension of buzz groups. The students are divided into pairs, which join to form fours, then fours to eights, and so on (Grantham, 2008). This pattern can encourage inclusive participation. As the groups get larger, the tasks or issues become more complex (Jaques, 2003). This method is useful for discussion of principles and theoretical issues.

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In "crossover groups", students are divided into groups that are later split to form new groups, to maximize the exchange of information (Jaques, 2003). Communication skills can be improved using this method. The author has used this method in one session of the serial management course, and found it very efficient. It can be useful in areas such as philosophy and history of LIS. It also has some advantages in education for reference work since students learn to listen carefully and then ask and answer questions.

Tutor's and Students' Roles in Small Group Teaching

The tutor is the manager of small group discussion (Brown and Atkins, 1988).

The role of the teacher or tutor is essential to the success of small group teaching. If class time is nearly all taken up by a lecture, little time remains for debate and improvement of intellectual and communication skills. The tutor must have specific skills, knowledge, and attitudes required for small group teaching. These include listening, responding, questioning, setting clear goals, handling quieter and dominant students, knowledge of group methods and learning styles. It is important to be able to move from teacher-centred to student-centred teaching (O'Neill, 2003). Tutors should provide all students with the opportunity to participate, valuing all questions, paying attention to students' attitudes, and putting students in groups according to their skills and abilities.

The role of students is also important in small group teaching. Gross Davis (1999) says that, "In a competitive academic environment, where students have most often been rewarded for individual effort, collaboration may not come naturally or easily for everyone". Without cooperation from students, achieving the goals of small group teaching is not possible. Small group teaching must be introduced to students completely before it is implemented. The students must also attain essential knowledge and additional skills such as verbal and communication skills and self-confidence. They should hold others' attitude in esteem, have knowledge of group dynamics, ground rules, and phases of group development (O'Neill, 2003).

Small Group Teaching and LIS

The educational needs of LIS and the characteristics and advantages of small group teaching encourage us to use this method. It would be helpful in understanding theoretical subjects and developing students' skills in reference, critical thinking, and research. Some fields of LIS would benefit more from this educational method, including:

Basic Concepts

Students' knowledge of the philosophy and principles of LIS is limited, and this can result in misunderstanding. Rahadoust (2007) says that, "if we have problems with understanding ourselves and our goals, so we will have more problems with understanding internal and external worlds". This understanding is the basis of intellectual skills such as critical thinking. Students must learn the words, meanings, and principles of their field. Only then can questions, research, and analysis be started (Mayers, 1994).

Considering the fact that one goal of small group teaching is to introduce the values and viewpoints of LIS to the students (Brown and Atkins, 1988), and bearing in mind the good educational environment for discussion and scientific communication in groups, we conclude that this method can be used for discussion of philosophy, theories, and fundamental subjects in LIS.

Reference Work

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One of the small group goals is developing students' communication skills (Brown and Atkins, 1988). Skills such as listening, answering, explaining, and questioning are important intrinsically and play an important role in reference work and librarian and user communications. If students learn these skills in small groups, they can perform their duties better in the future.

Critical Thinking

Critical thinking is important for developing verbal skills and creativity for solving problems. Critical thinking is used in all sciences and in all aspects of life. LIS has a close relationship with critical thinking in areas such as information literacy, webometrics, reference work, and information systems. Librarians have been less educated about critical thinking and if they have this skill, it has been the result of their personal knowledge and experiences and not the result of using proper methods of education (Ghiasi, 2007). This shows the importance of using practical methods to learn critical thinking. Small group teaching is one of these methods. Small group teaching helps students master concepts and apply them (Gross Davis, 1999).

Mayers (1994) asserts that it is impossible to develop critical thinking without discussion and problem-solving. He emphasizes that students do not learn critical thinking just by listening to the teacher. Moreover, communication skills such as questioning and answering are some important goals of small group teaching (Brown and Atkins, 1988).

Improving Research

According to Fattahi (2000), the situation of research in librarianship is not favorable. Small group teaching can pave the way for providing a suitable environment for research. Students can have the opportunity to do research under the direct supervision of tutor. A seminar is another method in small group teaching that is very useful for promoting research ability in students. The role of tutor in planning research projects for the students to prevent wasting their times and energy is essential in this method. They can help students overcome the weaknesses of LIS.

Strategies to Empower Small-Group Teaching

Three strategies can be used to improve small group teaching. These will determine policy and goals and provide students with the opportunity to share thoughts and have efficient interactions.

State expectations and policies

It is important to outline our expectations and policies, because students often do not know what the tutor expects of them. The tutor should talk about mutual expectations and explain to the students the value of asking questions (Brown and Atkins, 1988). Compiling these expectations and policies produces a written statement that fosters group interaction.

Determine goals and purposes

Specific purposes help direct the groups and discussions. These purposes consist of group discussion, improvement in skills such as analysis, problem-solving, critical thinking and decision-making (Small group teaching, n.d.). Communication and social skills are very important in LIS, and their development is also a goal.

Class environment

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The efficiency of small groups can be increased by using some easy methods of improving the class environment. One is seating arrangements. Circular seating, consideration of cross-group interaction, and regular change in pattern can all be effective (Brown and Atkins, 1988).

Conclusion

Teaching techniques can have a profound effect on learning. LIS programs must consider new educational methods. One is small group teaching. Developing skills such as reasoning and problem solving, teaching critical thinking and other communicative skills such as listening, asking, and answering are some of the educational goals which are can be achieved by this method. Tutor and students must understand their role and apply suitable methods to foster education in groups.

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