

‘Discussion with a Difference: Questions and Co-operative Learning’

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Abstract

Social education is built upon discussion. Questions are fundamental to such dialogue. Many of the questions that drive class discussion have the power to shape learning. How can teachers help students to enhance the questions that they ask? Recent work by Philip Cam offers a useful means of classifying questions. Working in the field of philosophy for children, Cam constructs a classification system for questions based on two key distinctions. Cam uses narrative as a point of departure for inquiry, but texts have a different place in the humanities. The model can be adapted to the humanities classroom. Drawing a distinction between source-specific and general questions is helpful to social education. The model can strengthen the questioning skills of students. When combined with co-operative learning strategies it creates fresh opportunities for meaningful discussion.

Discussion is central to the social education classroom. It is through dialogue that students engage in the meaningful exchange of ideas. The questions that teachers and students pose shape the way in which such discussions unfold. Open-ended questions lead students to discuss concepts more deeply. Closed questions tend not to foster such dialogue. How can we encourage students to pose questions that will strengthen their thinking? The classification system for questions designed by Philip Cam (2006) has the potential to enhance learning in the humanities. Designed to facilitate philosophical inquiry, this approach can be adapted to social education. It encourages students to ask questions that sustain productive dialogue. Co-operative learning strategies offer effective ways to implement this approach in the humanities classroom. This paper is in three parts. The first section explores the work of Cam. The second part applies this to social education. The final section examines suitable co-operative learning activities.

Questions enable, reflect and promote learning. It is important to value the questions that students ask as those of the teacher tend to dominate discussion (Dillon, 1988). Students

need to become skilled at asking questions as well as answering them (Godinho and Wilson, 2004). The criteria that Walsh and Sattes (2005) use to evaluate questions posed by teachers can be adapted to the context of students. Does the question promote learning? Is the question relevant? Does it provide a suitable challenge? Is its meaning clear? These criteria provide a sound foundation on which to build. The best way to learn about questioning is through questioning (Morgan and Paxton, 2006). This allows students to become active learners who demonstrate ownership of classroom inquiry. It puts into practice the democratic values of social education.

The Question Quadrant

Cam argues that classification of questions enhances discussion. Working in the context of philosophy for children, Cam observes that students often pose questions that provide inadequate foundations for sustained philosophical inquiry. In response, he advocates the use of a schema to enable them to reflect on their questions: 'The Question Quadrant'. The evaluative framework that this model provides enhances the relevance of questions. Its application strengthens the questioning skills of students. Having sorted questions according to this schema, students are in a better position to pursue searching lines of inquiry.

The model is based on two distinctions. The first is between open and closed questions. Responses to open-ended questions are unsettled matters of intellectual dispute. Closed questions have factual answers. This is not to imply that closed questions do not have their uses. They are often necessary for basic comprehension or clarification. The second distinction is between textual and intellectual questions. This reflects the origins of the model in philosophy for children. In this field, a key approach is to use narrative as a springboard for conceptual inquiry. Cam notes that children frequently ask questions about these stories that are literary, rather than philosophical. Textual questions concern the characters or events of the text. They do not foster conversation about broad concepts. In contrast, intellectual questions are the seeds of sustained philosophical discussion.

Cam combines these distinctions to form the sectors of the Question Quadrant. 'Reading Comprehension' (closed textual) questions allow students to establish a foundational level of understanding. The next part of the model is the 'Factual Knowledge' (closed intellectual) question. Such questions examine factual knowledge that is not stated by the text. This type of question may involve research, but the findings are not subject to academic dispute. 'Literary Speculation' (open textual) questions explore the specific narrative that is being read. They do not take discussion in a philosophical direction. The final sector of the Question Quadrant is the 'Inquiry' (open intellectual) question. These questions generate philosophical discussion. Cam aims to foster such questions.

The Question Quadrant and Social Education

How might we adapt the Question Quadrant to social education? The place of text in the humanities differs from that of narrative in philosophy for children. In subjects such as history, the text is often the object of study, rather than a means to a philosophical end. Historians regard texts as primary or secondary sources. Who created the source? When? What is its purpose? What are its biases? The source provides the foundation of contextual exploration, but remains part of the inquiry (as it is a product of its historical context). The best way to address this issue in the classroom is to identify the focus of the question. Some questions focus on the source. Other questions engage with wider concerns. In this case, the source forms part of a general context. Thus, when the Question Quadrant is applied to social education, it makes sense to replace its textual-philosophical axis with a distinction between source-specific and general questions. The distinction between open and closed questions remains unchanged.

What results might this adaptation of the Question Quadrant produce? In International Studies, students might examine a speech by the Minister for Foreign Affairs on the Asia Pacific Economic Co-operation (APEC) forum. A closed source-specific question could invite students to identify the members of APEC listed in the source. A closed general

question asks students to investigate the Gross Domestic Product of these states. This data would not be included in the ministerial speech. Open source-specific questions do not have settled answers. What does the speech reveal about the relationship between APEC and Australian national interests? How convincing is the evidence used by the minister? Open general questions focus on broader issues. What is the nature of power? How can multilateral initiatives assist the region? To what extent is the Commonwealth successful in its pursuit of Australian national interests? These questions generate discussion that promotes deeper learning.

The Question Quadrant and Co-operative Learning

Co-operative learning is the most effective way to implement the Question Quadrant in social education. This form of learning is based on the belief that students can achieve more as a group than they can as individuals. It involves interdependence of the task, learning objectives and incentives (Slavin, 1995). Johnson and Johnson (1999) identify five key elements of effective co-operative learning. First, students exhibit positive interdependence. Second, students are accountable for their learning and their behaviour as members of groups. Third, there is positive face-to-face interaction between students. Fourth, students possess strong interpersonal skills. Bennett and Rolheiser (2001) prefer the term collaborative skills. They regard this as a first step in a sequence that builds through communication to critical thought. Fifth, groups process their intellectual interaction to retain cohesion. Each of these conditions must be evident for co-operative learning strategies to be effective. A number of theories can explain the success of co-operative learning (Slavin, 1995; Killen, 2006). The social coherence perspective holds that the interaction of group members creates a climate of academic success. In his theory of proximal development, Vygotsky (1978) holds that learning occurs as a result of social interaction. According to this social constructivist perspective, co-operative learning provides the scaffolding that students need to build understanding. Cognitive theory endorses the conceptual reworking and elaboration required by co-operative learning.

The social studies classroom offers many opportunities for the implementation of cooperative learning strategies (Stahl, 1994). Small-group discussion activities benefit the Question Quadrant. Inside/Outside Circles and Round Robin (Kagan, 2007) are strategies that allow students to share their ideas with individuals or small groups. Team Jigsaw (Kagan, 2007) enables students to become experts on a topic before applying their ideas to a new task. These techniques facilitate discussion by dividing it into phases. This enables the inclusion of an evaluative stage in discussion. The importance of reflection on questions is highlighted by Hunkins (1995). He argues for a three step process of preparation, implementation and assessment. Students evaluate their questions in the third step. This metacognitive process serves to enhance their questioning skills.

Round Robin

One of the most effective learning activities for involving students in discussion is Round Robin. It is an excellent mechanism for gathering a range of responses. Students form small groups and are assigned a discussion topic. Each student then makes a response in turn. The role of contributor moves clockwise or anti-clockwise until all members of the group have participated in discussion. A helpful implementation strategy is to allocate each student a number. Students contribute to the group as their number is called. One variant of Round Robin is the collaborative production of written responses (Frangenheim, 2005). Each student writes a response then gives it to the person on their right. The next student adds to the response. Papers rotate until all members of the group have contributed to each response.

Round Robin creates excellent opportunities for the application of the Question Quadrant. Having read a source on Athenian democracy, small groups could use Round Robin to brainstorm a list of questions. The same strategy could then be used to apply the Question Quadrant. Students might find it helpful to divide the model into its component parts and assign each to a phase of discussion. In the first rotation, students decide if each question is open or closed. In the next rotation, students judge whether the question is source-specific

or has general application. This provides a foundation for subsequent small group or whole class discussion. Round Robin could also be used to nominate and explore questions about democracy in new groups.

The abovementioned variant of the activity is useful for building questioning skills. After reading the source on ancient Greece, each student writes a set of questions. Working individually, students apply the Question Quadrant and record the results on the same page. Students pass their work to the right. The new reader also applies the Question Quadrant to the list. The page completes a full rotation in this fashion. The feedback either confirms the evaluation of the author or indicates that additional thought is needed. This may require further discussion. Having applied the Question Quadrant, successive students invite responses to their closed source-specific questions. The Round Robin format is used for each sector. The final rotation would engage with open general questions.

Round Robin provides an engaging way for students to apply challenging concepts. Each member of a group can be assigned a specific task to foster this type of learning. For example, students read extracts from *Water Rights and Wrongs* (United Nations Development Programme, 2007). UNESCO (2006) holds that sustainability rests on four pillars: natural, social, economic and political systems. Education for sustainability integrates the principles that arise from these systems: conservation, peace and equity, appropriate development and democracy (Fein, 2004). Each member of the group is allocated a different aspect of sustainability. Students take turns to offer questions based on their area. A second phase of discussion can be used to apply the question quadrant. This evaluative component is crucial as open-ended general questions are likely to reveal the interdependent nature of the four systems.

Inside/Outside Circles

The Inside/Outside strategy offers an excellent mechanism for students to receive successive individual feedback. Students sit in two concentric circles. They arrange their

chairs so that each member of the inner circle faces a student from outer ring. One task is assigned to members of the inner ring and a related task is allocated to the outer circle. The rings rotate so that each student has the opportunity to interact with more than one class member.

Inside/Outside Circles can be used with the Question Quadrant in a number of ways. For example, individual students write some questions after reading a source on global warming. They classify the list according to the Question Quadrant. The class then forms concentric circles. Students in the inner ring share their work with a partner in the outer ring. The partner evaluates the way in which the student has applied the Question Quadrant. Students in the inner ring record this feedback. The outer ring then rotates one seat clockwise. The task is repeated. The previous judgement is confirmed or challenged. Further discussion occurs after another rotation. The tasks of each ring then swap: students in the outer ring share their questions and those in the inner ring adopt the evaluative role. All of this provides students with structured opportunities to enhance their questioning skills. In the next stage of the lesson, students discuss source-specific questions using this activity. This paves the way for an Inside/Outside Circles exploration of general issues or whole-class discussion.

Round Robin can be combined with Inside/Outside Circles. This combination offers rapid responses from a range of sources as well as sustained individual feedback. Students form the two rings, but apply the written variant of Round Robin to evaluate questions in their own ring. This means that they pass the questions to the person on their right. The papers rotate around the circle. Having reflected on their questions, students then use the Inside/Outside Circles format to discuss their source-specific questions with their partner. The outer ring rotates clockwise so that students gain a variety of perspectives. After a series of such rotations, the task changes to a discussion of general issues. The inner ring rotates anti-clockwise. Students seated in this ring share their questions with a variety of respondents.

Team Inside/Outside Circles (Kagan, 2007) is a useful variant of the activity. It is an efficient way to conduct class presentations. Having established an understanding of their material, students form the discussion circles. Team members sit together. Each inner circle team faces a group in the outer circle. The inner circle teams present to the corresponding outer circle group. Teams evaluate the presentation before sharing their thoughts with another group. The tasks of the circles then change over. This learning activity is very useful in social education. For example, each team is allocated a different set of articles from the United Nations Convention on the Rights of the Child as part of their work on personal citizenship. These are presented in accessible language in *Children's Rights and Responsibilities* (UNICEF, 2000). Each team formulates a series of questions based on these articles. They use the Question Quadrant to identify the open-ended general questions. Teams choose some of these questions and use them as a springboard for discussion. Students then move into the discussion circles. Members of the inner circle share their questions and provide an overview of their thoughts. Students in the outer ring respond. Next, the two teams assess the key question. The outer circle then rotates one team clockwise. Teams in the inner circle present their ideas to a new group. This is followed by a second evaluation phase. The role of each ring then swaps.

Team Jigsaw

Jigsaw discussion is a powerful tool for the exchange and development of ideas. Jigsaw 1 represented a response to racial tensions in desegregated classrooms in the United States (Aronson, Blaney, Stephan, Sikes & Snapp, 1978). Team Jigsaw is a flexible adaptation of the strategy (Kagan, 2007). It has the virtue of providing considerable support to individual students in a small-group setting. The teacher divides the class into small groups of identical size and assigns each a different task. The task requires the combined efforts of the group for successful completion. For example, students may be asked to discuss an article or generate solutions to a problem. They work together to build their expertise. Having completed this step, students form new groups. These include one representative of each of the original teams. The new groups then complete a task that requires them to draw

on their initial efforts. This activity provides a supportive, structured context for the Question Quadrant.

In International Studies, each expert team could read a different case study on global citizenship. Individuals list questions in response to the case. Working together, they apply the Question Quadrant to these lists. The expert groups then discuss the source-specific questions. This enables them to use the source to construct an understanding of global citizenship. Students then divide into the new groups. They discuss the general questions posed by each expert group. Students contribute insights to this discussion based on their cases. This activity creates rich opportunities for comparison. By combining their efforts, students find that they achieve more than would have otherwise been the case. This is the essence of co-operative learning.

A variant of this technique is Within-Team Jigsaw (Kagan, 2007). This strategy does not involve interaction between teams. Instead, students exchange ideas inside teams. Each student is assigned a task. Having completed this task, students share their work with other members of the team. This is followed by an assessment phase. For example, students could read 'The Four Horsemen' by Jenny Pausacker (1997). The story challenges readers to reflect on the way in which we respond to suffering caused by hunger, plague and war. Each student is allocated a sector of the Question Quadrant. Working individually, students pose questions based on the assigned sector. Back in the group, students discuss the questions posed by each team member. The students then undertake an evaluative task. Not only is the theme of the lesson central to global citizenship, but the learning process embraces the principles of co-operation, inclusion, participation, inquiry and interactivity endorsed by *Global Perspectives: a statement on global education for Australian Schools* (Curriculum Corporation, 2002).

Conclusion

Questions are at the heart of learning. They both enable and reflect understanding. Engaging classrooms are characterised by a spirit of inquiry. The deepest learning takes place when students actively pose meaningful questions. The model designed by Cam offers a useful framework for identifying rewarding lines of inquiry. It also provides a mechanism for students to enhance their questioning skills. The Question Quadrant can be adapted to reflect the place of source material in the humanities. Co-operative learning offers an effective way to implement this model. This combination enables the evaluation of thinking through discussion. Social education encourages students to find their own voice. The ability to formulate searching questions is a key part of this process.

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