

Sharedthinking: A Social Identity Approach to Critical Thinking

Nicholas Bowskill, Education (UDOL), University of Derby

Contact: N.Bowskill@derby.ac.uk

Introduction

Could a group-level approach to critical thinking offer advantages over individual-level strategies? To explore such an idea, this paper offers a social-psychological perspective on critical thinking. This is extended to provide guidelines towards the design of an 'identity-mediated practice.'

A case study from a School of Education is provided to show these ideas implemented in the group-relevant context of student-teacher placements. Finally, an emergent identity-mediated practice called SharedThinking is presented. This work was initially developed from doctoral research at the University of Glasgow and supported by the Kelvin-Smith Scholarship Fund (Bowskill et al., 2010, Bowskill, 2009, Bowskill, 2013).

Critical thinking has its roots in the Greek word *Kritikos*. It means 'able to make judgements' (Gupta and Upshur, 2012). As a concept, it has already achieved '*mythical*' status (Walters, 1989). It has become '*one of the most central concepts in western education*' (Jones, 2005).

There are individual aspects to critical thinking. However, critical thinking understood solely as 'generic skills' risks becoming '*filleted for epistemological rules ready for distribution*' (Edwards and Thomas, 2010). Such an individual-level view disregards the social context and the practice in which critical thinking might take place (Edwards and Thomas, 2010).

In response, this article explores a group-level approach to critical thinking. This is based on group membership and social influence. Groups have potential to offer multiple perspectives, a means of corroborating or disconfirming our views and provide a source of emotional support. On the other hand, groups can be restrictive for individuals and may generate groupthink.

We can think about group learning as a set of structures organised to achieve the same objectives through different kinds of activities. There are some advantages to finding optimal structures for group learning. For example, this might help organise learning and teaching in large groups or in online classes.

A focus on ideal structures risks missing the psychological influences exerted upon individuals and groups. To address this, we look at theoretical frameworks for considering a group-level of agency. Next, we look

at ways of creating a common group identity. We consider the idea of 'critical norms' as a group attribute before looking at anonymity and technology. Using such a framework, design guidelines are outlined for '*identity-mediated critical thinking*.' A case study is provided to explore the issues and opportunities for developing critical thinking contained within a social identity approach.

Social Identity Theory

As suggested above, groups are not passive environments. Under certain conditions, groups are an active influence upon the thoughts and behaviours of members (Haslam et al., 2012, Haslam, 2004). These are groups that matter to us and towards which we feel a sense of belonging (Haslam et al., 2012).

Social Identity Theory is a family of related theories that helps understand and explore these influences. Social Identity Theory and Self-Categorization Theory are the key components of the family. Together they make up the Social Identity Approach.

Social Identity Theory (Tajfel, 1974, Tajfel, 1969) explains how discrimination occurs between groups. Tajfel originated this theory arguing groups are a source of self-esteem. This was evidenced when people assigned to random and relatively meaningless groups showed a bias towards their group and prejudice against another group (Tajfel, 1974).

Self-Categorization Theory (Turner et al., 1987) was developed to explain the psychological processes described by Tajfel. In a 3-step process, we define ourselves as a member of a given group. Next, we align to the expected thoughts and behaviours associated with that group. We then compare our group with another relative to the social context and favour the group to which we belong.

Creating a Salient Social Identity

As mentioned, Self-Categorization Theory suggests that a sense of group-membership is generated in a comparison with an outgroup. However, it is possible to generate a sense of belonging to a salient identity without making such a comparison (Postmes et al., 2005, Swaab et al., 2007). This can be done in two ways using either a deductive or inductive strategy.

The first possibility is to use a top-down approach to generate a sense of identification. This *deductive* strategy can be achieved by imposing an existing superordinate identity on a group. An example, drawn from the literature (Jans et al., 2012) might be to give a group of people a uniform and then have them wear it (army, fire service, school, office etc.).

The alternative is to use a bottom-up approach. This *inductive* strategy is achieved by bringing different contributions together to create a sense a shared representation of the group in the mind of participants. An example might be to have people working together to create a design for a uniform. When the design is done and the parts assembled, each person might then wear the uniform (Jans et al., 2012).

Social Norms & Critical Thinking

Social norms are the beliefs, behaviours and practices associated with a given social group. They are the *content* of social identities. These group norms serve as a guide telling members what to do in group-relevant situations (Haslam et al., 2011). When individuals are mindful of their group membership, they are likely to relate their thinking to the perceived norms for the salient group identity (Bicchieri and Mercier, 2014, Livingstone et al., 2011, Neighbors et al., 2010, Hogg and Reid, 2006).

Importantly, in the context of this article, the aims or purpose of a group can also function as a group norm (Postmes et al., 2001a). This can take at least 2 forms. One of these is a consensus norm and the other is a critical norm. Groups with a consensus norm seek agreement as an overall outcome. This partly explains why groupthink develops (Postmes et al., 2001a).

A group with a critical norm respects diversity of opinion and values competing ideas. This is the case at both individual and group levels. An example of this would be an academic community as a group that might value individual difference while still promoting a sense of belonging.

Research shows a critical group norm improves the effectiveness of decision making at both individual and collective levels (Postmes et al., 2001a). This is because more available information is shared and considered by the group. Consensus groups tend to consider information available to everyone but often ignore information known to the few (Postmes et al., 2001a).

Technology and Social Identity

There is a growing interest in applications of social identity theory with technology. This work is largely based upon online environments, intergroup comparison and deindividuation. Within that body of work are some interesting points in relation to anonymity in online communication.

Anonymity is an important feature of online applications of social identity theory. In online settings, this reduces awareness of the self and others as individuals (Postmes et al., 2001b). This *deindividuation* effect thereby increases the tendency to see others in terms of social identities.

Anonymity allows less powerful group members to communicate with reduced fear (Postmes and Brunsting, 2002, Spears et al., 2002, Postmes et al., 2001b). It allows them to share grievances online and to realise others share similar concerns (Spears et al., 2002). This can be a source of social support and helps towards the development of collective strength (Postmes and Brunsting, 2002).

Guidelines for Designing 'Identity-Mediated Critical Thinking'

Based on the above, we can identify the following as design guidelines for a social identity approach to critical thinking supported by technology:

- Use a group theory to plan a common identity
- Use an inductive strategy to co-construct a common group identity
- Use discussion to develop a critical norm as a group attribute to improve decision-making.
- Use technology making sure participants are anonymous to promote to raise group awareness and build social support

The aim of this paper is to explore these design guidelines to develop a social and group-based idea of critical thinking. The research hypothesis is:

"If we can induce a sense of group-membership in the classroom, and if we can invoke a critical group norm through discussion to share concerns, then individual students will be motivated to self-evaluate as a group-member and engage in identity-mediated critical thinking."

Research Methodology

This is a qualitative piece of research and an adaptation of earlier doctoral research done at University of Glasgow (Bowskill, 2013). A case study approach was used to frame the research (Borko and Koellner, 2008, Yin, 2003, Yin, 1984, Yin, 1981). Case studies provide a boundary and structure to define a particular intervention (Yin, 2003)

Semi-structured interviews and audio recordings of small group discussions were used to gather data. A set of 3 semi-structured interviews were also carried out with a self-selecting sample of participants.

SharedThinking Technique as Process & Method

The session took 2 hours. A snowball group discussion technique was combined with the use of interactive classroom technologies (clickers).

The class was given a question as an organising framework for the session and the task was to co-construct question options. Question construction demands considerable mental effort (Sharp and Sutherland, 2007) and the provision of an open question might set boundaries for the co-construction task. The question put to the class was: "What was the most useful part of your placement experience in terms of your future life in the teaching profession?"

Students began working alone to record the most useful part of their placement experience which might contribute towards their future life in the teaching profession. Those personal views are shared in small groups. Each group discusses the pool of individual views and chooses one to share with the rest of the class.

Each item chosen by the small-groups was posted to the screen and embedded in the voting software. Individuals voted for their personal choice. The process generated a digital pie-chart as a representation of their shared concerns.

Case Study Context

The context of this case study was a group of 27 final year students in a new (post-1990) university in England. These were students in the School of Education. The students had just returned from their final teaching placements. The placements were in a range of different schools scattered around the region.

The traditional approach to reflecting on their experiences was to talk to their placement supervisor. Students would also complete a learning journal and completed a questionnaire as part of their placement review.

The tutor was interested in alternative approaches but had not previously been able to manage a large group to offer reflective conversations. The challenge was to organise meaningful dialogue about diverse experiences.

The aim was to explore the value of the SharedThinking technique in bringing together diverse experiences for a reflective classroom conversation. Could the class be both diverse and critical in a productive review?

Data-Analysis

The data was analysed using the framework below. This is a derivative of Stroup's Generative Learning Taxonomy (Stroup, Ares et al 2004) which is appropriate to this student-generated approach. The taxonomy includes:

- Participants work in a whole-group enquiry
- The start and end is unknown and determined by the interaction of those involved
- Participants are caused to talk and listen to each other
- The tutor's role is to orchestrate the interaction and manage the shift from small group to whole group and back again.
- The tutor's role is also to support the development of a shared and situated understanding of the issue
- The tutor's role is to listen as much as to talk
- Technology is used to scaffold the co-production of a visibly shared group-situated understanding. This shared understanding needs to be valid as representative in terms of detail, issues and participation. It must be plausible.

Findings

The findings here are presented in accordance with the modified Generative Learning Taxonomy mentioned above.

Participants work in a whole-group enquiry

One of the aims of this identity-mediated approach was to induce a sense of common identity. This is because salient social identities motivate group members to compare their thoughts with others as an act of self-evaluation and as affirmation of belonging (Hogg and Reid, 2006). Hopefully, the students would feel part of a group and this seems to be the case.

"You had the [framework] ready but we came up with the answers. We had the discussions. It was like being in groups, that kind of thing. It was good."

One consequence we might expect of that feeling of group-membership would be a sense of collective agency. This was accompanied by a sense of ownership and shared inquiry.

"It did feel like it was ours. It's like someone's come along with some questions and they don't know the answers, and that's what they're here to find out. ... It made it ours. It wasn't your session, so to speak, it was ours. We did it."

The start and end is unknown and determined by the interaction of those involved

The aim of the session was to organise a sense of open and shared inquiry. This would be in line with the development of a critical norm. Some students experienced this as an inductive (bottom-up) process of interpretation.

"...with us coming up with them there was no leading. It was like here's your discussion point. Off you go!"

The students appeared to have a view of teaching as the imposition of a specific view. They regarded learning and teaching as a potentially deductive (top-down) process. This seems to be apply even for interpreting placement experiences.

"If you'd given us the answers it would have been like you're leading us to a certain answer because if you've got the answers there you can't help but lead a group of people to a certain answer... You feel like you're led somewhere."

Participants are caused to talk and listen to each other

Students can and often do have very different placement experiences. They can be in rural or urban schools. Outside events may impact on the life of the classroom from families or beyond. Activities may or may not go to plan.

We might expect students to feel their placement experiences are unique to them. They may feel their experience has little in common with others aside from the general course experience of the university. This can be due to context or personal reasons.

Despite being assessed individually, students thought about their placement experience in relation to the experiences of others. An identity-mediated approach meant students were pleased to share thoughts and ideas. They saw each placement experience as a resource for learning together as student members of the profession. This helped them to develop some resilience.

".... if you're talking with people who have been in the situation at the time who've been there doing the same things that you've been doing and then hear that they've done the same things and they've gone down the same route, it gives you a bit more confidence."

In contrast, direct instruction does not appear to have the same impact. Students may lose confidence through a negative comparison with the tutor's guidance. They may not have the same quality of conversation and they may perceive advice as a form of correction.

"I think if a lecturer was standing at the front saying, 'Well you should have done this and you should have done that' because if you haven't done it you then sit and panic."

In practical terms, it is difficult to organise a reflective conversation with tutors for each student individually to discuss individual placement experiences in depth. The tendency to use reflective journals is useful. Self-evaluation questionnaires have value.

Despite this, readymade options provided by a tutor appear to change the nature and quality of the internal conversation. There is a performative element which, for some students, can feel procedural and shallow.

"I think your discussion would be 'Yes or No?' Say if it was like evaluating your placement and you had like 'Reflective journals' people would go 'No.' 'Discussion with teachers, 'Yes.' You wouldn't get the conversation. You'd get yes or no answers."

The Influence of Others

Students were receptive to different perspectives. Hearing from their peers made them aware of other ideas. The peer-group elaborated and extended initial thinking in a process of social comparison.

"Yes, it was quite nice because when we fed back you got to hear from other groups and you thought 'oh that's nice I hadn't thought of that.' It was different ways of answering the question sort of thing."

A common complaint about group work is the risk of groupthink. This is a tendency towards consensus. The students involved here were more critical individually and as a group. They evaluated alternative perspectives and considered them against their group's decision. They were prepared to change their point of view based on the views of others.

"We went first and said ours. Then everybody else went and said theirs and, as other people were suggesting, we had said to each other as a group, 'oh we've obviously got that a bit wrong'...and we'd all gone, 'actually other people have suggested other things that we actually agreed with more.'"

Feedback from others prompted reflection in the group when their option received no votes. This prompted a re-evaluation of the initial view and a likely search for an alternative. This suggests a wish for views to 'fit' with the group or to seek social validation.

"...the question where nobody voted for our answer we did have a sort of a talk about it in the transition to the next question...sort of quick comments rather than a full-on discussion but if we'd had chance we probably would have come up with something [else]."

Learning How to Talk About Practice

Discussion is a key feature of an identity-mediated approach. As mentioned above, this is central to the development of a critical norm in the group. It embraces individual difference within a group-goal of criticality, productivity and decision-making.

As we would expect within a critical norm framework, participants felt free to use their own words and ways of thinking to describe, discuss and question their placement experiences. This sanctioned their personal interpretations and might then help build meaning together.

"you don't have to worry about using the correct term or...it was a chance to not have to worry that you're not using the correct language or you could just say it straight or say it as

you would every day rather than having to think 'Oh hang on, what word do they expect me to use here?' Yes, you could just say it. You could basically say, 'I did this then I did this.'"

Consistent with a critical norm approach, students felt able to attend the issues that were of interest to them individually and as a group. This helps make the session meaningful and professionally authentic.

"When we worked in little small group discussions you were able to delve in depth into what worked and how our sets worked and different elements of planning."

As part of this research, some of the small-group conversations were recorded and transcribed. In the extract below, the students discuss their placement experiences in different schools. The students below discussed the experience of trying to design lesson plans and apply them in school-based practice.

As can be seen below, several group-relevant aspects arose in the discussion. They included:

- timetables,
- working with experts,
- translating subject knowledge into professional practice
- personal autonomy within the context of the school

Student A: *"I think for me one of the main things was the progression children make, and it was like where do you take them next, because for me I would go in and teach them literacy one week and numeracy the next week and it's like differentiation..."*

Student B: *"Yes, well for me, it was that we started something on the Friday and we didn't finish it off and I just knew I could go in on Monday even though we were supposed to finish it this week and I just knew I had the opportunity to go in on Monday morning and finish it...."*

Student A: *"Yes because you had ownership of the timetable"*

Student B: *".....finish it off this week I mean and it's not having new teachers coming in and like 'I'm doing this now' and 'You haven't got time to do that. You should have done that on Friday' and then it's just a case of fitting it in when you could."*

Student A: *"Well for me as well progression was something I found quite difficult, especially in numeracy because we'd been taught subject knowledge, but I didn't know how to teach numeracy and I didn't know it until now because she was, 'Right, well where do you go to take the next step?' and because we were doing addition she was like, 'What's the next step with addition?' and I was like, 'bigger numbers?' and she was like, 'No because the progression that they have to do is numbers that add up to 10 because technically when they're able to add 7 add 3 technically they should be able to do add 77 add 3.' It's like they have to have the secure knowledge to 10 and I thought, 'well I didn't know that.' And just being able to discuss progression with someone..."*

The activity structure facilitated a process of talking and listening. Students shared stories from different placement experiences and made sense of them alone and together. In comparing their placement experiences, they moved beyond concerns about one placement in a search to develop professional meaning.

The course tutor selected these final year students to participate in this activity believing they would be more eloquent than students in earlier years of the course. The tutor felt these final year students would be more able to articulate their experiences and discuss them in a professional manner. The quote below suggests that students see talk as a vehicle for learning in any year.

"I think it would help [first years] because I mean you don't know how to evaluate something. You've never had to do it before, until you come to university. Not really and I think it would be good for them especially just after their placement so they can learn how to talk about it."

The tutor's role is to orchestrate the interaction and manage the shift from small group to whole group and back again.

The students seemed to be aware of a structure and able to work within it together. It was experienced as an enabler rather than an inhibitor of dialogue. The tutor role was to shape the session and manage the time. The tutor organised the dialogue and managed the use of technology in a facilitative role. Within the overall framework, the tutor also gave feedback and input in a supportive manner as required.

You had the [framework] ready but we came up with the answers. We had the discussions. It was like being in groups, that kind of thing. It was good."

"I think it gave you a clear finish so you created the end-view"

Technology is used to generate and display a shared situated understanding.

The design guidelines above suggest anonymity is an important feature of online technology. In the online environment, individual anonymity could lead to being group-aware. Similarly, it could mean individuals feel safer to express concerns and this might lead to finding solidarity with others feeling the same way.

In this classroom context, students described the experience using terms like 'we' 'us' and 'the group.' The co-construction of the options to be voted on by the group produced a sense of accountability. For instance, rather than seeking validation from a tutor they were concerned to legitimate their views with the group.

"I think because everybody knew they were going to be presented to the rest of the group visually and also everybody would be interacting with those that they had to be right. Well not 'right' but they had to be detailed and accurate."

Discussion

This paper provides a guide to the design of identity-mediated critical thinking using a Social Identity Approach. A practice called SharedThinking was presented along with a case study of implementation in a group-relevant issue of student-teacher placements.

The research hypothesis was:

"If we can induce a sense of group-membership in the classroom, and if we can invoke a critical group norm through discussion to share concerns, then individual students will be motivated to self-evaluate as a group-member and engage in identity-mediated critical thinking."

Based on this initial case study, SharedThinking appears to invoke a sense of group-membership in the classroom without the need for intergroup comparisons. The use of technology allowed anonymity in the classroom and supported the development of the collective voice in ways consistent with the Social Identity Approach. Discussion and the visualisation of diverse thinking supported and helped to maintain a critical norm.

This is a single case study. We do not know how representative this data and these students are of other classrooms. Further research is already happening and will be reported elsewhere to explore other contexts and other disciplines. The possibility of other applications and variations of the SharedThinking technique invite further research.

This case study has brought into relief the reason for looking beyond individual approaches to critical thinking. This study has argued individual skills and competencies are important but individuals may be motivated to self-evaluate in relation to a salient common identity. Having skills does not mean they will always be deployed and it is context-sensitive.

SharedThinking helps students get beyond the issue of individual placements being 'good' or 'bad' experiences. Sharing experiences and concerns in this way develops dialogue on group-relevant issues. This can contribute towards group-situated and socially-authentic professional development using an identity-mediated approach to critical thinking.

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