Fostering Group Autonomy Through Collaborative Learning in an Online Environment

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Abstract

Learner autonomy is recognised as being associated with effective and successful learning. Whilst significant scholarship has focused on individual learner autonomy, a review of the literature indicates that the interdependence and social dimension of learner autonomy are largely under-researched. The primary objective of this study is to examine how learners engaged in a collaborative inquiry outside the classroom utilising an asynchronous online discussion forum and to what extent the collaborative task fostered group autonomy. Employing thematic analysis, postings of 20 students in a peer-moderated online discussion forum were analysed. The results revealed that the process of knowledge co-construction advanced and deepened the learners’ understanding of the subject matter. Furthermore, the collaborative inquiry helped establish a community of learning whereby students supported each other emotionally and cognitively, and they wanted to achieve well collectively. The study concluded that a well-designed collaborative task is key to fostering the social and interdependent dimension of learner autonomy.

Keywords: learner autonomy, collaboration, group autonomy, online discussion boards, community of learning

Learners’ ability to take control of their own learning has long been recognized to be associated with effective and successful learning (Benson, 2007; Holec, 1981; Little, 2007) and a consensus seems to have been reached among educators that the ultimate goal of teaching is to foster this capacity in learners and help them become lifelong, independent learners. Over the last few decades, the primary focus of research in the field of second language acquisition (SLA) has been to investigate cognitive and affective development of learner autonomy in individuals and identify conditions for fostering independent learning (Benson, 2011; Little, 1995, 2007). In recent years, there has been a paradigm shift in education and more emphasis is placed on the significant role of social interactions and interactive dialoguing in the process of learning and knowledge construction. A result of this social constructivist approach to learning is that there is an increased recognition of the social dimension of the construct learner autonomy. However, to date, the social aspect of learner autonomy has been largely under-researched, especially in the field of SLA. This research
study aims to fill the gap in the literature, examining how group autonomy was fostered and evolved during the process of collaborative inquiry. This study is significant in theory and practice. Theoretically, the empirical evidence provided by the study will provide insights into the features of different facets of learner autonomy and the optimal conditions for fostering them. Practically, it is hoped that findings from this study may give pedagogical implications for classroom teachers and educators at self-access learning centres to improve their task design which will support learners to exercise collaborative agency both inside and outside the classroom.

**Review of the Literature**

**Learner Autonomy: Individual Autonomy and Group Autonomy**

In the field of autonomy, the term ‘autonomy’ is often used to refer to learners’ capacity to take more control of their learning (Benson, 2011; Holec, 1981). However, scholars hold diverging views when it comes to the association of autonomy. During the 70s and 80s, autonomy was perceived to be closely associated with individualisation; thus, autonomous learning meant that learners determined their own needs and acted upon them by working through materials of their own choice or prepared by their teachers (Holec, 1981; Riley, 1996). This conceptualisation of autonomy links the learner with an individual who has distinct needs, characteristics and capacity. In practice, it implies learners studying languages independently and in isolation from their teachers and peers. A significant amount of research has been conducted, predominantly focusing on individualized autonomous learning in classroom settings and through self-access or out-of-class initiatives (Benson, 2013; O’Rourke & Carson, 2010; Reinders & Benson, 2018). However, this concept of individualized autonomy has received widespread criticism due to a lack of consideration of social features of learning (Benson, 2011, 2013; Little, 2007; Toohey, 2007). One of the most important developments in the theory of autonomy in the last decade is the proposition that learner autonomy is a socially-situated construct and that learning involves working together with teachers and other learners to accomplish shared goals. This social conceptualisation adds interdependence to the concept of learner autonomy, implying that learners are not only responsible for their own conduct in the social context but also cooperate with others in the learning group to make collaborative decisions. Little (2000, 2007) contended that learners’ capacity to participate collaboratively and critically in social interactions is central to the development of learner autonomy. Toohey (2007) concurred, maintaining that learners are “*never* (italics original) independent; rather, they are linked to other people and their tools...
and their practices in complex ways” (p. 241). This socially-situated view leads to a more complex and broader conceptualisation of learner autonomy and provides a new direction for research and classroom practices. However, not much empirical research has been conducted to investigate the interdependence among learners. Group autonomy in action is, therefore, not well understood. This study conceptualizes autonomy as a socially contextualised construct, aiming to explore the extent that a collaborative inquiry utilising an educational technology, online discussion forum boards, can foster interdependence among learners.

**Collaboration Utilising Asynchronous Online Discussion Boards**

The arrival of Web 2.0 environments offers unprecedented opportunities for peer interaction and collaboration in educational practice. Among all the computer-mediated communication tools, the asynchronous online discussion (hence after referred to AOD) seems to excel. The AOD is a text and web-based environment enabling users to interact with one another asynchronously without the constraint of time and place. A typical interaction within an AOD involves an audience of peers who are expected to read written discussion posts and contribute to various discussion threads or trees by writing posts and responding to feedback on academic topics. These topics act as a foundation and enable the social interaction and co-construction of knowledge across time and space among learners. A review of the literature in higher education reveals that the AOD has been adopted extensively and widely in diverse disciplines for collaboration and knowledge co-construction (Di Iacovo et al., 2017; Loncar et al., 2014; Osborne et al., 2018; Zhong & Norton, 2018). In their theoretical framework of the Community of Inquiry, Garrison et al. (2000) emphasised the importance of three interdependent elements for an online community inquiry: cognitive, social and teaching presence. Social presence in the model refers to social connections among online participants and encourages community building, which is pertinent to the construct under study, suggesting that the AOD can be a promising tool for fostering social dimensions of autonomy in language learning.

The literature review indicates that notwithstanding the shift toward social and collaborative approaches to learning and the necessary investigation of the socially-situated learner autonomy, empirical studies examining group autonomy are largely neglected in SLA research. Furthermore, whilst technologies have the potential to propel a shift from learners being a passive recipient of content knowledge to an active participant in knowledge construction, investigations of the actualization of the technology-based learning environments for fostering group autonomy are scant in scholarship. The current study aims
to address the gap identified above, addressing the question: To what extent does collaborative inquiry learning in the AOD foster group autonomy?

Method

Description of the Course Design and Participants

The research site for the current study was at a university in China. However, the course that informed this research was a New Zealand qualification, focusing on English academic skills. As part of a joint business degree agreement, a New Zealand institution assigned teaching staff to deliver the credit-bearing course on site at the host (Chinese) university for five weeks. Due to the intensity and time constraints of the course delivery, the New Zealand institution decided to adopt a blended learning approach combining traditional classroom-based teaching with online components. This study focused on one of the online activities, an asynchronous online discussion (AOD). The AOD occurred in the forum function on Moodle, the Learning Management System (LMS) used in the course. The task required students to work outside the classroom in groups of four or five to create and share contents relating to a task topic, corporate social responsibility (hereafter referred to CSR). Specifically, students were required to: (1) post at least three contributions of 80 words each (a minimum of 240 words) demonstrating their understanding of the task topic; (2) pose three questions to team members; and (3) share two resources. The forum was designed as a student-moderated discussion whereby a randomly (the first student alphabetically in a group) selected student moderator led the discussions in a self-access setting while the instructor remained as a non-participant observer. Both the quality and quantity of students’ postings on the forum discussion were assessed (7%). Furthermore, the outcome of the collaborative inquiry was presented in a subsequent group oral presentation, comprising 15% of the overall course assessments. The primary pedagogical goal of this task was to provide a platform where students could exercise control over their learning through conducting a student-led collaborative inquiry outside the classroom, which would ultimately ease the pressure of the intense and heavy workload on the teachers’ part.

Following the ethical procedures, potential participants for the study were contacted six months afterwards when they had completed the course and their grades had been approved. Due to the time and scope constraints of the study, purposive sampling (Patton, 1990) was used to select potential participants. It is a technique widely used in qualitative research for the identification and selection of information-rich cases. Having received full information of the study, twenty students gave their permission to access their posted
messages, and they were reassured that their identity would remain anonymous and confidential in this report.

**Data Collection and Analysis**

The primary objective of this study was to investigate the extent that collaborative inquiry in an online discussion forum could foster group autonomy. To this end, this investigation utilised 178 threaded messages (approx. 19,642 words) posted by the 20 participating students as a result of the interactions generated by the task. As the data in this study were collected retrospectively after the participants had completed the course, they were the natural and unbiased communication occurring over a four-week period of online discussion.

Thematic analysis (Braun & Clarke, 2006) was employed to analyse the data collected. Because of the exploratory nature of this research, there was no pre-conceived framework or imposing priori codes. The themes that the web-based collaborative learning offered for group autonomy surfaced inductively from the data and was continually refined through my close interaction with the data (Strauss & Corbin, 1998). Specifically, data analysis involves four phases:

Phase 1: Data immersion. This phase involved immersing myself in the data whereby I read and re-read the online postings repeatedly until I had reached a comprehensive understanding of the data.

Phase 2: Open coding. This phase started open coding the set of data for the first participant. During the line-by-line scrutiny of the data, codes were affixed to the units of analysis. This could be single words, short phrases, complete sentences, utterances or extended discourse. Each unit was identified by the participant and provisional categories.

Phase 3: Data reduction and theme building. At this phase, the codes were studied carefully and were clustered under an umbrella theme. For example, I merged the postings in relation to using positive and inclusive language, expressing gratitude, using emoji, calling by name, seeking help into one theme, and generated a thematic category, a community of learning, as a result.

Phase 4: Theme consolidation. During this process, all the tentative, thematic categories were tested against the set of data for the subsequent participants, to see if they continued to hold. When new themes were identified, the previous cases were re-examined and the new provisional categories were added to the subsequent data analysis.

Phase 5: Data file creation. At this phase, I created data files for each theme containing all the relevant units of analysis identified in phase 2.
In order to capture both patterns and examples, this report will balance summary and quotation (Morgan, 1998), and the quotes will be taken directly from the data without the researchers’ attention to the grammatical and linguistic errors.

Results

Following the thematic analysis as described above, the data revealed that the collaborative inquiry in the AOD promoted three dimensions of group autonomy. These will be discussed in the following sections.

Facilitating Collective Knowledge Construction

The data revealed that an overwhelming proportion of the postings and interactions in the discussion forum were related to the task topic, corporate social responsibility (CSR). Table 1 gives a breakdown of the participations’ posted messages in accordance with their functions.

Table 1
Facilitating Collective Knowledge Construction

| Theme                                      | Code                                                      | Quantity |
|--------------------------------------------|-----------------------------------------------------------|----------|
| Facilitating collective knowledge construction | Share resources and links, evidence and examples           | 115      |
|                                             | Respond to queries from peers and demonstrate own understanding of the task topic | 96       |
|                                             | Ask questions to clarify and elicit questions from peers  | 80       |

As is shown in Table 1, 115 postings were links and resources from journal articles and book chapters. They were posted and shared with team members as references to deepen understanding of the task topic, as evidence to support the stance of their posts, or as examples of CSR practices in the corporate world. Ninety-six posts were replies to questions raised by the team members, and 80 posts were questions whereby learners: (1) elicited opinions from their team members; (2) gave turns to other fellow students to open the floor for discussion; and/or (3) sought help from team members to advance their understanding of the task topic. This process of knowledge co-construction appeared to have enhanced learners’ understanding of the task topic and developed a shared repertoire of resources, leading to critical reflection of their local context. The following excerpts of interactions among the participants illustrated this process.
Participant 13 seemed to be concerned about a lack of CSR in China but was unsure of the best way to resolve the issue. She posed a question to her team:

Research in CSR has just begun in China. Some organizations regard it as a profit-making tool. So what experience do you think we should learn from other countries? In other words, how to improve the progress of CSR in China?

To the question, participant 10 replied:

… in my opinion, managers should think over the influence of their activity to the society when he or she makes a decision. As for society, I think that government should make rules to promote the social responsibility of companies. I want to share a website with you for you to read further.

To the same question, participant 14 offered a different perspective: “companies should consider more about what employees really need rather than some vanity projects”. He elaborated his view with an example:

For example, some commercial banks gave their employees a mobile phone as the reward for working hard, but what the employees really want were some holidays to stay with family or travelling with other colleagues to learn more about each other.

He concluded that “if a company want to become bigger and stronger, they must treat employees right. Be kind to their employees and people-oriented…learn to praise them, and inspire them”.

**Establishing a Community of Learning**

Another theme surfacing from the data was that the online collaborative learning helped establish a community of learning where learners shared their emotions and sought help from members of their learning community (see Table 2).
Table 2

Establishing a Community of Learning

| Theme                                      | Code                                                                 | Quantity |
|--------------------------------------------|----------------------------------------------------------------------|----------|
| Establishing a community of learning      | Use positive (e.g. “happy”, “honoured”) and inclusive language (e.g. “we”, “us”) | 158      |
|                                            | Use emojis, e.g. smiley, sad faces etc.                              | 65       |
|                                            | Call by name                                                        | 54       |
|                                            | Express gratitude for help received                                 | 39       |
|                                            | Seek help                                                           | 28       |

Table 2 reveals that posts were laden with positive and inclusive messages. The typical lexis the learners used were “wonderful”, “happy”, and “glad” when they expressed their delight to be part of the team. Another salient linguistic feature in their posts was the predominant use of different forms of collective pronouns, e.g., “we”, “us”, “our” (N=105). This indicated that the participants identified themselves as a member of a community with a collective sense of purpose. Within this learning community, learners encouraged each other by: (1) giving encouraging and positive evaluative feedback when a team member shared thoughts with the team, e.g., “Ray, the suggestions you made about Chinese companies are very insightful” (participant 5); (2) using emojis to express joyful emotions and gratitude when receiving help; and (3) calling each other by their first name. The transformed relationship within the learning group meant that students affiliated themselves with their group members and felt comfortable seeking help when they identified gaps in their own learning. They knew that other team members would not ridicule them: “Finding sources is new to me and I don’t know how to find ideas and where I can get a good example of CSR practice. Can anyone help me?” (participant 8). To this call for help, his team answered:

Hi Tom. Take it easy 😊 This process is new to all of us. You can start by typing your question in Baidu search engine and see what happens. In the meantime, I found something about good CSR practice and I’m sharing this with you. (participant 9)

Promoting Group Achievements

A noticeable feature of the postings was that all the participants made it their responsibility to achieve their collective goals: 1) contributing to the knowledge co-construction and 2) achieving well in the group oral presentation. As mentioned previously, the task required students to post three messages of 80 words each (a minimum of 240 words in total) demonstrating their understanding of the content. Table 3 illustrates that a total of 178 messages were contributed to the collective inquiry with an average of 8.9 posts (approx. 982 words) per student.
Table 3
Promoting Group Achievements

| Theme                  | Code                          | Quantity |
|------------------------|-------------------------------|----------|
| Promoting group        |Contribute to collective inquiry | 178      |
| achievements           |Share presentation tasks       | 8        |
|                        |Practice together              | 6        |

Evidently, all the students exceeded the expectations required of the course by taking full responsibility for their own individual learning, which ultimately contributed to the shared responsibility and collective success in the task completion.

Another interesting and unexpected feature of the postings was that when the learners had completed the task, they took the initiative and proceeded to discuss their group oral presentation, which was beyond the task requirements. The students used the forum discussion to allocate task and organize group practice:

I will choose the third part of the presentation which about the philanthropy. Philanthropy is the most important way to fulfill CSR. So this part will include the CSR's impact on philanthropy, their connection and some examples. I will finish and send the PPT to Rolly on Tuesday night. (participant 3)

It seems that the forum discussion board promoted a sense of group achievement, and the students wanted to achieve well as a team: “Our team slogan is ‘making amazing miracles forever’” (participant 14). “I wish all of us can get good grades! Continue refueling!” (participant 6).

Discussion

The current study revealed three features of group autonomy that the online collaborative inquiry promoted over a 4-week period of online discussion. The collaborative task enhanced knowledge co-construction, the group members bonded, leading to the establishment of a community of learning where members supported each other cognitively and emotionally, and it promoted collective achievements. This study has yielded similar results to research studies on group dynamics, reporting that social/group learning could generate the affective and favourable rapport among the members, leading to positive cognitive outcomes and interdependence among group members (Dörnyei & Murphey, 2003; Kimura, 2014). Likewise, studies on using social technologies also revealed that social
interdependence and collaboration were promoted when integrating social technologies in a learning task (Beseghi, 2017; Sánchez-Gómez et al., 2017).

Little (1995, 2007) argues that the promotion and development of language learner autonomy hinges on the development of teacher autonomy. In other words, the development of autonomy in learners, be it individual or group autonomy, depends on the learning resources and classroom practices from the teacher. When an optimal condition is created where learners can access resources and exercise their agency, autonomy can be promoted and developed.

Four features were prominent in the task design in the current study. Firstly, the task requirement was specific and cognitively challenging. As mentioned previously, the task completion entailed three posted messages, two shared resources and three questions; the task topic, corporate social responsibility (CSR), was new and unfamiliar to students. While the precise number of the task completion criteria quantified learners’ individual responsibility in the collective task, the task also provided sufficient room for learners to exercise their agency over the approaches they adopted in order to search for and share information and the sources they selected to contribute to the collective inquiry. Another feature of the task design was that the collaborative inquiry led to a tangible finished product, the group oral presentation. Learners were fully aware that they were expected to showcase the outcome of their team effort at the end of the enquiry. The group presentation may have motivated learners to participate in the process and to achieve collectively. Thirdly, low-stakes assessments were built into the task design by marking both the process and the finished product of the enquiry, which may have contributed to the task engagement and completion. Finally, designated students were assigned to moderate the discussion, which offered the student moderators an opportunity to take full charge of each stage of the collaborative inquiry. It also nurtured student leaders. It seems that the collaborative task in this study created an optimal condition for fostering interdependence among learners during the observed period. Results from this study lent empirical support to Little’s (1995, 2007) argument that it is a prerequisite for teachers to create an autonomous classroom where learners are given the opportunity to take responsibility in order to develop learner autonomy.

**Conclusions, Pedagogical Implications and Limitations**

The objective of this study was to investigate the extent to which online collaborative learning could foster interdependence among learners. The archived posted messages revealed that all participants demonstrated a propensity to assume individual responsibility,
but at the same time working interdependently to make collaborative decisions and reach the goal collectively.

Findings from this study have pedagogical implications. Firstly, the online discussion forum seems to have many properties to engage learners in the discussion of pertinent social, educational and cultural issues which can be facilitated by learners outside class. Its potential for fostering autonomous learning, especially in self-access settings should be explored further. Additionally, the study suggests that a properly designed task is key to fostering different dimensions of learner autonomy. When designing a collaborative learning task, educators need to consider the following factors: (1) the task topic (Is it cognitively engaging and challenging?); (2) the process (Does the task provide a scope for learners to exercise control over their learning?); (3) the finished product (Can the task be presented collectively and measured in a tangible format, e.g., a poster, a wiki, a video?); (4) the roles (Have roles been assigned? Can each member be held accountable for the task completion?).

Whilst the data for this study were naturally occurring interactions among learners, the sample size was small, making the wider application of the findings difficult. Future studies could examine a larger sample size. Furthermore, as both contributions of online discussion forums and subsequent oral presentations were assessed, it is not clear if the learners’ autonomous learning behaviours displayed in this study were driven by their desire to achieve higher scores. Further studies are therefore warranted to compare the effects of assessed tasks and non-assessed or self-access learning tasks on the extent and dimensions of learner autonomy. Finally, student moderators in this study were randomly selected. Future studies could investigate this further by rotating the role of student moderators to offer insight into the impact this role might have on the development of student leadership.

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References

Benson, P. (2007). Autonomy in language teaching and learning. *Language Teaching, 40*(1), 21–40. https://doi.org/10.1017/S0261444806003958

Benson, P. (2011). What’s new in autonomy? *The Language Teacher, 35*(4), 15. https://doi.org/10.37546/JALTTLT35.4-4

Benson, P. (2013). *Teaching and researching: Autonomy in language learning* (2nd ed.). Routledge. https://doi.org/10.4324/9781315833767

Beseghi, M. (2017). Using social networks to promote collaboration and leadership in foreign language learning. *Studies in Self-Access Learning Journal, 8*(4), 305–322. https://doi.org/10.37237/080403

Di Iacovo, F., Moruzzo, R., & Rossignoli, C. M. (2017). Collaboration, knowledge and innovation toward a welfare society: The case of the Board of Social Farming in Valdera (Tuscany), Italy. *Journal of Agricultural Education and Extension, 23*(4), 289–311. https://doi.org/10.1080/1389224X.2017.1302889

Dörnyei, Z., & Murphey, T. (2003). *Group dynamics in the language classroom*. Cambridge University Press. https://doi.org/10.1017/CBO9780511667138

Garrison, R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment. *The Internet and Higher Education, 2*(2), 87–105. https://doi.org/10.1016/S1096-7516(00)00016-6

Holec, H. (1981). *Autonomy and foreign language learning*. Pergamon.

Kimura, H. (2014). Establishing group autonomy through self-access center learning experiences. *Studies in Self-Access Learning Journal, 5*(2), 82–97. https://doi.org/10.37237/050202

Little, D. (1995). Learning as dialogue: The dependence of learner autonomy on teacher autonomy. *System, 23*(2), 175–181. https://doi.org/10.1016/0346-251X(95)00006-6

Little, D. (2000). Learner autonomy and human interdependence: Some theoretical and practical consequences of a social-interactive view of cognition, learning and language. In B. Sinclair, I. McGrath, & T. Lamb (Eds.), *Learner autonomy, teacher autonomy: Future directions* (pp. 15–23). Longman/Pearson Education.
Little, D. (2007). Introduction: Reconstructing learner and teacher autonomy in language education. In A. Barfield & S. H. Brown (Eds.), *Reconstructing autonomy in language education: Inquiry and innovation* (pp. 1–12). Palgrave Macmillan. https://doi.org/10.1057/9780230596443_1

Loncar, M., Barrett, N. E., & Liu, G.-Z. (2014). Towards the refinement of forum and asynchronous online discussion in educational contexts worldwide: Trends and investigative approaches within a dominant research paradigm. *Computers & Education, 73*, 93–110. https://doi.org/10.1016/j.compedu.2013.12.007

Morgan, D. L. (1998). Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative Health Research, 8*(3), 362–376. https://doi.org/10.1177/104973239800800307

O’Rourke, B., & Carson, L. (2010). *Language learner autonomy: Policy, curriculum, classroom: A festschrift in honour of David Little*. Oxford.

Osborne, D. M., Byrne, J. H., Massey, D. L., & Johnston, A. N. B. (2018). Use of online asynchronous discussion boards to engage students, enhance critical thinking, and foster staff-student/student-student collaboration: A mixed method study. *Nurse Education Today, 70*, 40–46. https://doi.org/10.1016/j.nedt.2018.08.014

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Sage.

Reinders, H., & Benson, P. (2018). *Research agenda: Language learning beyond the classroom*. Cambridge University Press.

Riley, P. (1996). ‘The blind man and the bubble’: Researching self-access. In E. S. L. Li, R. Pemberton, W. W. F. Or, & H. D. Pierson (Eds.), *Taking control: Autonomy in language learning* (pp. 251–264). Hong Kong University Press.

Sánchez-Gómez, M. C., Pinto-Llorente, A. M., & García-Peñalvo, F. (2017). The impact of wikis and discussion boards on learning English as a second language: A mixed methods research. *Digital Education, 32*, 35–59.

Toohey, K. (2007). Conclusion: Autonomy/agency through social-cultural lenses. In A. Barfield & S. H. Brown (Eds.), *Reconstructing autonomy in language education: Inquiry and innovation* (pp. 231–242). Palgrave Macmillan. https://doi.org/10.1057/9780230596443_19

Zhong, Q. M., & Norton, H. (2018). Educational affordances of an asynchronous online discussion forum for language learners. *TESL-EJ, 22*(3). https://www.tesl-ej.org/wordpress/issues/volume22/ej87/ej87a1/