Discourse Community Analysis: My Computer Science Classroom

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A discourse community (DC), as defined by Swales, is an “assemblage of people who broadly share occupational or recreational experiences, goals, and interests” (Swales, 2016). A discourse community also involves some aspect of advancing present knowledge relevant to the objective of the group. As Melzer said, “In most discourse communities, new members can expand the knowledge and genres of the community” (Melzer, 2020). When new members join the community, information is spread through communication, and it develops new ideas that adds on to the existing knowledge, and brings the community a step closer in reaching their goals. Thus, a DC serves as a platform where individuals with a shared goal engage in communication to exchange information and feedback, fostering the expansion of knowledge. One discourse community I belong to is my computer science class named CSC148, as a student member. This DC can be joined as a student, teaching assistant, or professor, and the aim is to develop and test code, and to solve problems using the python language. Hence, this paper will illustrate how the discourse community of my computer science classroom exemplifies the progress of knowledge inherent in a DC, with a particular focus on students, using Swales’ theory.

Firstly, a discourse community must have a broadly agreed upon set of goals. In my computer science classroom, the central objective is to “understand computing systems, and to learn how to program various problems using data structures, and object-oriented programming” (Peterson, 2024). In addition, the mechanism of intercommunication within this DC can be in-person such as in a classroom or in a professor’s office hours, as well as online, through email, Quercus, and Piazza (Peterson, 2024). Quercus and Piazza are learning management and networking tools that enables students to collaborate, and give feedback.

Next, member participation that provides information, feedback, and initiates action happens through different platforms. This includes in-person lectures and office hours, where

information is shared, and feedback is provided by teaching assistants (TA) or professors. In addition, Piazza is extensively used, where a lot of questions regarding assignments and tests are asked, and the other members of the DC contribute to develop an answer. To initiate action, professors work together to create tasks and assignments for students, which are posted on Quercus (Peterson, 2024).

Consequently, communication and member participation in this DC signify the advancement of knowledge. In my computer science classroom, collaboration and discussions generates and exchanges new ideas for solving coding problems. On the other hand, feedback and peer review increases knowledge when code is tested for efficiency and correctness. As members of the group test and revise one's code, potential mistakes or alternative coding approaches may be identified, which adds on to the individual's existing knowledge, as they learn from their mistakes.

Furthermore, a discourse community utilizes genres in the furtherance of its sets of goals and as a means of instantiating its participatory mechanisms (Swales, 2016). Primarily, in my computer science classroom, there exists different types of positions, such as students, professors, and teaching assistants (UTM, 2023). Each post has its own purpose in the discourse community, which contributes to achieving the overall goal. Secondly, the work that students do in a computer science class, is also a genre. This includes "coding assignments, documentation, presentations, and collaborative coding projects" (Peterson, 2024). Moreover, the lexis used for communication within the group is the python programming language (Peterson, 2024).

The genre and lexis of the computer science classroom DC are both characteristics that progress the knowledge within this community. Firstly, the types of positions exhibit a hierarchy where professors and TAs acquire more experience and understanding of the field compared to

students. This ensures that knowledge is continuously growing, where students have access to resources for addressing questions and resolving confusion. In addition, the types of assignments given to students offers hands-on practice and application of programming concepts taught in class, which reinforces the goal of the DC, and strengthens knowledge. As new concepts are introduced and built upon during class sessions, knowledge within the community continues to evolve. Secondly, the lexis of the DC, particularly focused on Python, contributes to the expansion of knowledge in this programming language.

Moreover, in the computer science classroom, there exists a core group of members who are professionals in this field, including professors, and teaching assistants. Professors possess extensive knowledge and experience in programming, while teaching assistants, have completed courses like CSC148, and are able to offer valuable insights and support based on their own learning experiences (Peterson, 2024). Additionally, the discourse community has “silential relations,” where there is a sense of things that do not need to be said (Swales, 2020). For example, plagiarism in coursework is implicitly understood as an academic offense, as code cannot be shared and/or copied from other sources. As mentioned in the syllabus, “Academic integrity is essential to the pursuit of learning, and as a result, UTM treats cases of cheating and plagiarism very seriously. Assignments are individual work” (Peterson, 2024).

Lastly, the "horizons of expectations" incorporates a range of assumptions, and anticipations that form within a DC. For example, CSC148 is one of the most difficult computer science courses taken in the first year of university, and thus, there is an expectation that students acknowledge the course’s demand for commitment to rigorous study. As stated in the syllabus, “Students may anticipate challenging assignments that push their knowledge and skills to new levels” (Peterson, 2024).

The experienced members of the group, silential relations, and the horizons of expectations all contribute to the progression of knowledge, whether it is small or big. As mentioned, experienced members guide learning processes and ensure that knowledge remains uninterrupted. Similarly, silential relations, like the prohibition of plagiarism, encourages students to develop critical thinking skills and address challenges independently, which expands on their knowledge. Additionally, having a set of expectations laid out in a DC helps the members mentally prepare and work hard to achieve their goal. Hence, the shared commitment promotes genuine learning within the community, and motivates students to continuously strive for success by furthering their knowledge, and understanding.

In conclusion, the discourse community within the computer science classroom embodies various characteristics, described by Swales, all of which offer advancement of knowledge within the group. This analysis suggests that a DC serves as a platform where knowledge is continuously absorbed by members, representing one of the many benefits of discourse communities. As a result, a DC is ideal for knowledge acquisition, innovation, and skill development, preparing its members to collectively reach their shared goals.

References

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