Chapter 2
Online Collaborative Learning Tools and Types:
Their Key Role in Managing Classrooms Without Walls

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ABSTRACT

Online/web-based collaborative tools enable teachers and students to perform a wide range of tasks, such as interactive discussions, online collaboration activities, sharing and accessing electronic learning resources, and many more others. It not only promotes critical thinking and reflection in students but also encourages them to develop a sense of community, thus enabling the creation of an environment in which further collaborative work can take place. The author has categorised various tools into 11 types that deal with idea generation and brainstorming, live conference, robotics and coding tools, mapping, design, online group work and document collaboration, and online communication and content development. The chapter explains the online collaboration with its features, preparation required by institution and role of teacher presence in online learning. It also emphasizes that library consultations (i.e., librarians) directly boost student learning, so the active collaboration of librarians is a must.

A. COLLABORATIVE LEARNING

Collaborative learning is a situation where students are able to socially interact with other students, as well as instructors. In essence, learners work together in order to expand their knowledge of a particular subject or skill.

Collaborative learning is based upon the principle that students can enrich their learning experiences by interacting with others and benefiting from one another's strengths. In collaborative learning situations, students are responsible for one another's actions and tasks which encourages teamwork as well (eLearning 101 – concepts, trends, applications, 2014).

Collaborative learning engages learners in knowledge sharing, inspiring each other, depending upon each other, and applying active social interaction in a small group. Therefore, collaborative learning depends upon the art of social interaction among learners rather than a mechanical process (Tu, 2004). The idea of group work in learning finds its root in work from the Russian psychologist Vygotsky (1978) who explored the causal relationships that exists between social interaction and individual learning providing a foundation of the social constructivist theory of learning (Muuro,Wagacha, Kihoro & Oboko, 2014).

Collaborative learning is based on the view that knowledge is a social construct. Collaborative activities are most often based on four principles:

- The learner or student is the primary focus of instruction.
- Interaction and "doing" are of primary importance
- Working in groups is an important mode of learning.
- Structured approaches to developing solutions to real-world problems should be incorporated into learning (Chandra, 2015).

Some activities or assignments well suited for collaborative learning include:

- Case studies
- Discussions
- Student-moderated discussions
- Debates
- Collaborative writing
- Collaborative presentation
- Games
- Demonstrations

Benefits of collaborative learning include:

- Development of higher-level thinking, oral communication, self-management, and leadership skills.
- Improves analytical skills and critical thinking
- It boosts confidence
- Promotion of student-faculty interaction.
- Increase in student retention, self-esteem, and responsibility.
- Exposure to and an increase in understanding of diverse perspectives.
- Preparation for real life social and employment situations.

B. ONLINE COLLABORATIVE LEARNING

Collaborative learning can be conducted either offline or on the web, and can be done asynchronously or synchronously. It allows students to learn from the ideas, skill sets, and experience of others enrolled in the course. By engaging in a shared task (whether it be a project or lesson) students gain the opportunity to learn a variety of skills, such as group analysis and collaborative teamwork building skills.

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