

Flipping the Classroom for Online Learning

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Recent changes to educational systems have called for shifts in how individuals function as learners, educators, and members of larger social groups. One of these shifts has included a move from face-to-face instruction to online learning. Although online learning has provided an alternative to mainstream learning for a few decades, the impact of its popularity has not been recognized until recently. Typically, online learning has been viewed as an addition to regular programs rather than a means of providing mainstream instruction (Strayer, 2012). For this reason, it may not have been deemed a reliable approach to learning. However, technological advancements and other influences have created a demand for online learning programs and, as Roel et al. (2013) have indicated, flipping the classroom by inverting the order of instruction provides a valid response to the need to adapt to millennial frameworks of learning. Applying elements of a flipped classroom to the online learning experience is a way of linking learning to socio-constructive approaches to education and serves to enhance learner understanding within active, collaborative and engaging contexts.

What is the flipped classroom?

The flipped classroom is based on principles of flipped learning, a four-pillared approach to instruction that transfers traditional teacher-led instruction to an interactive environment that relies on individual and collaborative group effort to engage in intentional learning with instructor support and guidance (Flipped Learning Network, 2014). As the name suggests, flipping learning reverses the order of direct instruction so that learners are able to take time to review carefully selected content in meaningful ways before engaging in collaborative and interactive exchanges of information through teacher guidance and support (Abeysekera & Dawson, 2015; Strayer, 2012). Flipping the classroom for online learning links motivation to learning through completing appropriate, realistic and relevant tasks that require self-direction and

collaboration (Abeysekera & Dawson, 2015; Love et al., 2015). In online learning situations, this results in a three-pronged approach to instruction that relies on individual input, group/collaborative effort, and educator scaffolding as shown below (see Figure 1).



Figure 1: Three-pronged approach to instruction

Moving from a traditional to the flipped classroom model of education offers benefits for educators and learners (Smallhorn, 2017). For educators, flipping the classroom provides opportunities to:

- review and re-create curricula
- reflect more deeply on teaching practices
- engage more meaningfully with learners
- determine gaps in student understanding

Similarly, learners benefit from flipping the classroom through:

- increased interaction within the learning community
- increased motivation and interest
- co-creation of knowledge
- deep learning of concepts

Online learning, socio-constructivism and the flipped classroom

Online learning provides a unique opportunity to combine individual and collaborative aspects of learning into socio-constructive educational practices referred to as collaborative constructivist learning environments (Garrison, 2017). Using a reversed framework of instruction for online learning requires learners to initiate action within a collaborative framework through discussion, problem solving, or other types of group activities (Garrison, 2017; Love et al., 2015). Through self-directed effort and collaboration, learning becomes meaningful, taking into consideration specific learning contexts and learner differences.

Generating meaning through individual, contextual, and collaborative effort corresponds to Vygotsky's (1978) socio-cultural theory that explains how learning can be achieved through individual input, scaffolding of information and engagement within the educational context. An approach to learning that focuses on the co-construction of knowledge reinforces learning through inquiry and the need to establish a community of learners who come together to explore, assess, create, communicate, and problem solve (Love et al., 2015). The diagram below (Figure 2) outlines how a learning community can be formed through intentional creation of an environment of collaboration with instructor support to enhance individual cognition.

Smallhorn's (2017) study on second-year university students suggested how flipping the classroom increased learner participation and engagement with course materials. Additionally, Smallhorn noted how the flipped classroom provides a forum "for students to grapple with

difficult concepts in an environment where educators and peers are on hand to support learning" (2017, p. 51). According to Abeysekera and Dawson (2015), using the flipped classroom model raises the level of intrinsic motivation, allowing learners to evaluate information for themselves and think critically about the content of instruction. This approach to learning moves the axis of interpretation from the educator to the learner thus avoiding single interpretations of information and building understanding among heterogeneous groups of people.

How can the flipped classroom be incorporated into online learning platforms?

As in inquiry-based learning, a flipped classroom builds supervision of instruction into the learning tasks themselves. This ensures that learners complete readings, engage in analysis and establish understanding through responses to activities that are related to the learning content (Love et al., 2015).

As Strayer (2012) noted, technology can help achieve this type of educational environment by providing a platform for learning that outlines specific tasks for individual practice and group work. Learning begins with activities or assignments (written, oral, presentation) that invoke individual cognition through study and recognition of information. This can be achieved through asynchronous learning in the form of:

- assignments that include reading, summary or analysis of course topics
- critique of videos or outside web links to information
- gathering research, literature or case studies related to course content
- individual reflection and synthesis of course content
- practice exams or activities

Individual tasks provide a basis for drawing meaning from content while collaboration addresses social aspects of learning and invites learners into a deeper understanding of concepts (Love et al., 2015). In essence, collaborative engagement allows the focus of instruction to be geared towards drawing meaning from content and relating it to experience or the specific situational or instructional context. This can be achieved through cooperative synchronous sessions such as Zoom sessions, discussion forums, or small group meetings as outlined below:

- small group analysis of topics of discussion
- collaborative brainstorming of ideas
- collaborative critique of gathered literature on course

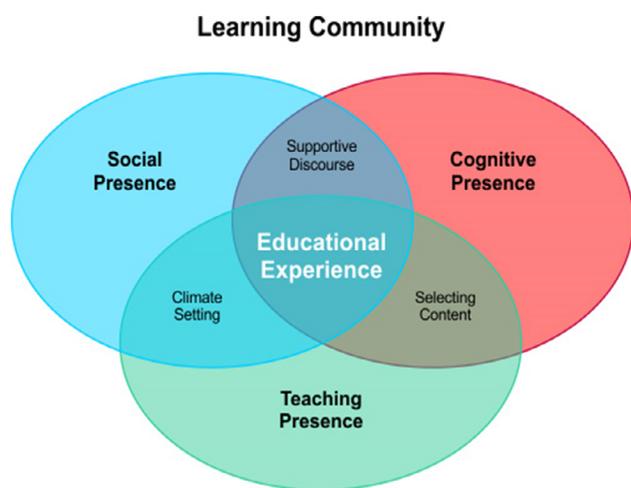


Figure 2: Online learning community

topics

- cooperative problem solving
- group discussion of completed activities or practice exams

Conclusion

Complexities in learning are linked to the need to not only provide the dissemination of information but to make sure learning is supervised and, ultimately, achieved. It is in the supervision of learning that many educators and learners get stuck, particularly when considering approaches to online learning. Motivational

strategies have indicated, though, that in learner-centered situations, learners are intrinsically motivated, and even self-directed, by tasks and the application of learning to problem solving and other types of authentic activities (Abeysekera & Dawson, 2015). Requiring that informational aspects of learning be done individually and followed up with an application of information to task-based assignments provides time and opportunity to create understanding of materials before applying them to a specific context (Strayer, 2012). It also places a focus on completing learning tasks in a collaborative context after an attempt has been made to link content to individual cognition, background, and experience (Love et al., 2015).

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