

THE SOCIAL ARENA OF THE ONLINE SYNCHRONOUS ENVIRONMENT

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ABSTRACT

Daily advances in technology are restructuring the way we live, work, learn and interact. The rapid development of synchronous online venues available to distance education has led to a heightened need for theory & practice in the effective use of these collaborative learning live venues. This paper is directed to faculty members who are already teaching synchronously online or who would like to start teaching synchronously online. It provides best practices, ideas, tips and tricks, and insights to foster successful learning experiences online and ways to think about online synchronous teaching differently than as a mere replicate of traditional campus-based instructional activities.

Keywords: Online synchronous environment; Learning environment; collaborative learning; distance education

AIM OF THE STUDY

Experienced classroom teachers moving to the world of online learning bring with them a plethora of experiential and pedagogical approaches that do not always transfer to the on-line environment. This study describes preliminary results from practical experience and hopes to transition faculty members away from the traditional practices of delivering classroom training. Hoffman (2004) uses an analogy of synchronous training and the introduction of television in the 1950s. When the television was created, it mimicked the theater setting, with one camera fixed at a specific angle. It did not take long to discover that what played well in a theater did not necessarily play well on a television. Hence, the best practices in traditional training do not necessarily work in a Live online training (p.4).

THE ONLINE SYNCHRONOUS TOOLS AND THE VIRTUAL CLASSROOM

In an online synchronous venue, the teacher and the students are at a distance. They meet at the same time, online, through a web conferencing tool. All is needed in most cases is a computer with an internet access and a headset. There are many online synchronous technologies available today for instructional purposes that include almost the same basic features as online chat, shared whiteboard and fully integrated synchronous learning systems. Higher-end synchronous learning systems provide a whole gamut of integrated features, including live text messaging (chat), emoticons, one or multi-way voice over IP (VoIP), video broadcasting, virtual whiteboard with a rich variety of whiteboard tools, application sharing or screen sharing, file transfer,

web tours, polling and quizzing features, activity indicators, multimedia playback, breakout rooms, recording and playback, and more. Finkelstein (2006) gives a detailed description of each tool in his book, chapters 3 and 4.

Finkelstein (2006) defines the Virtual Classroom as “the venue most likely to include digital counterparts for all the key resources available in a traditional physical classroom” (p.58).

A virtual classroom, because of its versatility and capacity, whether it uses some or all the features available in real-time teaching, can provide successful learning outcomes, and can best support, technologically and pedagogically, small to medium sized groups. The main aim though is to implement the methods and pedagogical approaches in an online live venue through the effective use of the tools available in the synchronous interface.

PEDAGOGY

The theoretical rationale of this study is based on constructivism and socio-cultural concepts on learning & cognition, as well as active learning strategies, since they provide a sound theoretical and practical foundation for the live elearning process.

According to Finkelstein (2006), the real-time online venue within a learning environment supports at least five major functions: instruction, collaboration, support, socialization and informal exchanges, and extended outreach (p.3). Instruction in a real-time venue does not exclusively happen when the facilitator passes information to the students by lecturing, but can also occur online through give-and-take tasks where the learner will actively construct his/her knowledge. The traditional teacher-centered model is rapidly being replaced by alternate modes of instruction.

Collaboration is a key element in a successful learning environment. Gokhale (1995) defines collaborative learning as “an instruction method in which students work in groups toward a common academic goal” (para.7). He believes that collaborative learning enhances critical thinking.

According to Vygotsky (1978), students are capable of performing at higher intellectual levels when they work collaboratively versus individually. Collaboration in the real-time venue can be reached through the effective use of the tools available and a careful planning of the collaborative activities, and hence will engage learners through building a “community of learners”.

Support is a crucial element in motivating and retaining learners through the personalized human support online and the immediacy of the exchange in the real-time online setting.

Socialization and informal exchanges through chatting and talking enhance interaction between learners and between learners and facilitators. The real-time online venue is a social arena where people interact, creating a friendly, safe, and comfortable space and become part of the community of learners.

Extended outreach occurs when a web conferencing tool is used outside formal instructional settings. Its implications are very useful to the institution's internal communications and relationships beyond the university through online conferences, training and professional development.

CONSTRUCTIVISM AND SOCIAL CONSTRUCTIVISM OR SOCIO-CULTURAL APPROACHES

An educator who is committed to a constructivism view of learning is an educator who believes that knowledge is actively constructed by the learner, and that "coming to know is a process of adaptation based on and constantly modified by a learner's experience of the world" (Jaworski, 1993, para. 2).

Bonk and Cunningham (2006) refers to Cobb's ideas in identifying constructivism within at least two variations: cognitive constructivism and social constructivism (p.32). Cognitive constructivism relies mainly on Piaget's theoretical framework illustrating how knowledge develops in human organisms, with a focus on "making learning more relevant, building on student prior knowledge, posing contradictions and addressing misconceptions" (p.34). Note that collaborative synchronous tools can be used from cognitive constructivism and social constructivism perspectives as well. Some educators and researchers see the importance of social constructivism in the elearning environment is that it moves educational technologies to the next level of development, focusing on a learner-centered approach, social interaction and dialogue tools.

Social constructivism relies more on Vygotsky, with a focus on building communities of learning. It "emphasizes human dialogue, interaction, negotiation and collaboration" (p.35).

Vygotsky, considered as one of the greatest psychologists of the twentieth century, studied the origins of mind in culture and society, where culture and society are not external factors but rather are generative forces influencing the mind (Kaptelinin & Nardi, p. 39).

According to sociocultural theory, the individual's cognitive growth and development are stimulated mainly by social interactions and cultural institutions. The continual development of learning a subject is a by-product of mediation and socialization into a community of learning practice, through which a novice develops into a competent member of the community. A person reaches higher forms of mental activity through goal-oriented, directed, and mediated activity, where the mediators are either physical or symbolic. The learner's interaction with this mediating tool will facilitate the learner's interaction with the physical world at the same time as shaping the learner's interactions, perceptions and learning experience. The mediator tool adopted in this study is the e-conferencing synchronous online interface, as a social arena for online teaching and learning. Cognitive growth of an individual's mental functions and patterns of thought, according to Vygotsky, occurs within his or her Zone of Proximal Development or ZPD (Bonk and Cunningham, 2006, p.37). "Vygotsky defined the ZPD as the distance between a child's independent problem-solving level and that obtained under adult guidance or in collaboration with more capable peers" (Bonk and Cunningham, 2006, p.37).

-The ZPD might be evident in the online learning social arena of the synchronous tools, through the interactions of learners to learners, learners to facilitators, and through the computer tool that promotes thinking related instant feedbacks and mechanisms.

Active learning strategies

Limmer and Baudour (2005) define the term Active as "*To participate (take an active role)*" and the term learning as "*To acquire wisdom, knowledge, or skill*" and active learning as "*To take an active role in the acquisition of knowledge and skills*" (para.5). The Active learning strategy has been documented as far back as 490 BC when Socrates used problems and open-ended questions to guide students to analyze and think about their environments and to stimulate discussion and critical thinking among students. It encourages students to take an active role in their learning process.

The facilitator and learners work together to create a partnership in learning the subject matter efficiently. An example of Active Learning is seen in the movie, *Dead Poets Society*, in which Robin Williams plays an English teacher, trying hard to get students involved in his class by using innovative, creative and different approaches (Warren, R.G., 1996, p.7). According to Chickering and Gamson;

Learning is not a spectator sport. Students do not learn by sitting in class listening to teachers, memorizing prepackaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate to it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves. (as cited in [Bonwell, & Eison, 1991, p.3](#))

Best Practices

In a synchronous online classroom, the facilitator and participants are geographically dispersed, where each person is attending the class live, from home, office or library, using a computer with internet access and a headset. Because there is no eye contact possible in the virtual classroom, no body language to read, no real presence as is found in a brick and mortar classroom, a virtual presence must be created to achieve a successful learning outcome.

The contacts happen through each person's voice, chat, emoticons, and participation and contribution to the whiteboard feature. Starting to teach by distance requires a change in the way one teaches. It is hard to make changes, especially when one is used to one's own methods of teaching, but going live online, as Finkelstein (2006) describes it, is like being a good host at a dinner party, where;

One prepares for the guests' arrival, welcomes them warmly, frequently assesses the mood in the room and anticipates guests' needs, makes everyone feel included, facilitates connections and conversation, offers guests something to take home with them, knows when to say good night, and leaves everyone wanting more so they will want to return when next invited. (p.6)

One best practice before going live is to attend a virtual classroom with a colleague or as a student. This will give the facilitator ideas, insights, best practices and strategies when teaching live online.

But it is important to note here that even though it is beneficial to see each other's teachings, methods and approaches, teachers should note that what might work for others might not work for them. As Parker Palmer (1998) noted in *The Courage to Teach*;

Good teaching cannot be reduced to technique; good teaching comes from the identity and integrity of the teachers." (p.10) "But by identity and integrity I do not mean only our noble features, or the good deeds we do, or the brave faces we wear to conceal our confusions and complexities. Identity and integrity have as much to do with our shadows and limits, our wounds and fears, as with our strengths and potential." (1998, p.13). "In every class I teach, my ability to connect with my students, and to connect them with the subject, depends less on the methods I use than on the degree to which I know and trust my selfhood—and am willing to make it available and vulnerable in the service of learning. (p. 10)

Hence, there are no best practices and theories that work for all of us. Much depends on the subject one teaches, the students one has, and more importantly on the identity and integrity of the teacher. What follows is some best practices that will give you ideas, these are preliminary findings and much more will be added through time and experience.

Before you go Live!

Before you start teaching through a live synchronous venue, get as much training as possible in the technical ways of using the available tools. Practice with a trainer online, practice with colleagues, and practice on your own. Master the basic tools in order to make the synchronous venue as transparent as possible so that you will use them automatically, without thinking of the "tool" but rather thinking about the pedagogy behind using the tools.

Best practice

Do not try to learn all the tools at once! At the beginning, use the basic tools and train your students in using them. With time, when you and your students are comfortable with the synchronous venue, add more advanced tools one at a time, and practice with your students using the new and advanced tool. It is quite a sense of achievement when new tools are incorporated effectively. For instance, start using the audio and the basic features of the whiteboard, then incorporate a web tour at a later stage of the course.

Preparing for live online sessions

The aim is to transform a Synchronous venue into trouble-free, fast moving and interactive events.

Technical issues and problems

Be prepared for any technical problems. At the beginning of every live session, test the microphones and make sure that everybody can hear and talk. If a participant is using the microphone and suddenly he/she cannot turn it off, then the moderator will take away the privilege of the Audio instead of just wasting time fixing the problem.

If a participant is not able to use the headset, have a Conference Call number handy so that the participant can dial and listen to the conversation, while participating in the vclass.

Most importantly, make sure that your students have the support line phone number, in case the connection gets lost, or sudden technical problems arise. In addition, be aware of firewalls when you application share or do a web tour.

Train your students

Before going Live, it would be helpful to send an email to your students, providing information about the synchronous tool, and to download some software, like Java for instance. During the first meeting with the students, provide an audio conference number in case the student has a trouble logging into the vclass, and provide training as well to your students. Ask the students to try the different features of the interface! The best way to make them feel comfortable in using the new interface is to let them Play! Have a screen capture of the Student interface window on the Whiteboard so that you can show the students the different tools and get them acquainted with the basic features. Then, give them few minutes to free write on the whiteboard. Here is a message a student wrote (University of Alaska Fairbanks, teacher: Zeina Nehme. Thursday Sep 7, Beginning Arabic vclass, 5:10 to 8:10 pm,): "This is the most fun I have had all day!"

Lesson plans

To organize and plan your lesson beforehand is of course a must. But once in the live session, some unexpected things happen; Hence you should be flexible, innovative, and have a backup plan.

DURING THE LIVE SESSION

A broad perspective

'Let go of the wheel!' Some have described the live online session as a bus or car ride, where the facilitator is the driver and the participants are the passengers. The driver has to be confident, experienced, know where to go, and make sure that the car/bus is well equipped and safe, and that the road is well maintained and paved. But more importantly, the car/bus driver has to let go of wheel sometimes, and invite the participants to take over and drive. He has to trust enough the participants, and give them control of the wheel, even though the participants might take the car/bus in a different route, get lost or go against the traffic in a one-way street. The driver has to let the other participants help and assist the inexperienced passengers. That is a wonderful way of incorporating the active learning techniques, and the constructivism theory, where the learner is part of the drive (learning experience), constructing his/her knowledge by doing. Synchronous delivery lends itself to a constructivist mode.

'Be able to multi-task!' Practice makes perfect. The more you teach and use the Live synchronous tool, the better and more comfortable you will be in using the different tools simultaneously: responding to the chatting questions and comments, talk, and at the same time, work on the whiteboard, and always take note of your participants' responses and emoticons.

If we get back to the analogy I made earlier about the facilitator being a car/bus driver, one should multi-task as well, be aware of the dashboard and the outside traffic.

A FOCUSED PERSPECTIVE

Facilitating and Communicating in the synchronous virtual classroom

'Practice your voice as if you were a radio Broadcaster.' Jennifer Hofman states that the trainer's voice is perhaps the most important delivery method in an online live vclass since it is the only human connection in the online environment. (2004, p.131)

The more exciting, inviting and friendly your voice is, the more engaged and interested the learners will be. Your voice will transmit all the good and positive energy that the learners seek.

Establish ground rules

During the Live Session, while using the online synchronous venue, there are different ways of communicating, interacting and participating in the class. Depending on the situation and the learning tasks, you should be explicit in how and when and what tools to be used. For example, while a pair of students is presenting a report to the rest of the class, the facilitator encourages the other learners to post questions in the chatting area, or raise their hands, in case they need to ask a question or add a comment or the facilitator; Or you may ask the learners to take notes of questions and comments they have, and wait until the end of the presentation to start the discussion.

Respond to messages and manage chat

The chatting or text messaging window is the "heart" of the classroom management. A good practice would be to always keep an eye on the chatting area; it is where all the comments, concerns, questions and interactions mainly happen. Addressing people by their names and responding to the messages acknowledge people in class, and show that you care for the participants' concerns and comments.

Maximize interactivity

Interactivity is the main key for a successful learning online outcome. The synchronous venue should not be used only to lecture, nor to go over the power point presentations. The participants should be involved in the learning process. Through interaction, the participants will be more of active learners than passive learners. You have to make sure that all the learners are participating. For example, you can maintain an interaction graph during each lesson to ensure contact with each learner or you can prompt some form of interaction every 3 to 5 minutes. The interaction has to happen between learners and learners, learners and facilitator, and learners and subject. Interactivity not only enhances learning but it creates an environment where the learner does not feel the isolation and frustration in an online course. Informal and unplanned interactions are sometimes the best way to learn!

Keep tuned in to the participants

In order for learning to stay active, listen and "feel" for the atmosphere of the participants. Just because eye contact and body language aren't available doesn't mean the participants are not sending signals. Avoid letting the session become a passive experience for learners. (Hoffman, 2000, para.13)

Engage the Senses

Paul Stacey gives an example of an online course he took on "enjoying wine" and how effective the learning becomes using the smell and taste senses as he reports back to the class about his outcomes (Stacey, 2003, para. 9). A Physics teacher might ask the participants during a Live session to step away from the computer and play with a spring in order to discover the properties of energy. Once back in the live session, the physics students would share and discuss their outcomes with the rest of the class.

Keep it human

Learning is a social activity, through social interaction and dialogue tools, according to the social constructivism approach. Facilitating a sense of community of learners, by humanizing the virtual presence, is an asset in a virtual classroom. Encourage the participants to create their own profiles with pictures available for the others to see, check with your participants about any distractions happening around them in the room, bring people closer together, and facilitate a sense of understanding each other's personalities online. A sense of presence or "virtual presence" is crucial in viewing and respecting each others as humans, and caring for each others' learning outcomes and concerns. When a sense of presence is achieved, it is easier to convey knowledge, ideas, emotions, humor and expectations.

Communicate high expectations

Whether expectations are set implicitly or explicitly by the facilitator, they definitely help learners to succeed. The synchronous venue is well equipped for communicating high expectations. Online, you have the opportunity to gauge the communication of assignments and expectations as to whether the learner understands and accepts them (Finkelstein, 2006, p.29). Setting high expectations triggers the learner to meet them, avoids disappointing the facilitator, and adds self confidence and trust in the learners' abilities to meet those high expectations.

Offer prompt feedback

Due to the immediacy and instantaneous in the nature of the live synchronous venue, prompt feedback among the facilitator and learners can be enhanced to steer the learning experience in the right direction. When you provide instant feedback, the participants "can immediately absorb it into their understanding and begin to build upon it, or they can take issue with it and instantly seek and receive more feedback, thus creating an experience that constantly builds into itself" (Finkelstein, 2006, p. 23). Prompt feedback is essential in an online environment especially since the participants lack many of the traditional nonverbal cues used in a face-to-face classroom. Spontaneity and prompt feedback support the learners in taking things a step further, questioning, reflecting and advancing the dialogue.

Reward your learners

Do recognize and reward the results of online collaboration so that participants feel they have engaged in a worthwhile endeavor. This will make them more responsive to future collaboration efforts. Rewarding, encouraging and congratulating learners will make them proud of their successes, give them a sense of achievement, self confidence, and will encourage them to achieve more. Online, it can be done as simply as showing the "applause" emoticons or the "smiley face".

Warm up the participants before class starts

At the beginning of the vclass, it would be helpful to use icebreakers and warm-up exercises to keep the students engaged, while waiting for all the participants to join the session.

Avoid lengthy lectures!

It is one of the Active Learning strategies. Avoid being "Sage on the Stage" but rather a "Guide on the Side". Griff Richard and Zeina Nehme (2007) mention in their paper about the Primacy-Recency effect.

It describes the effectiveness of replacing a lengthy instructional lecture with shorter burst of information, and that things are best remembered at the beginning and at the end of a learning session. Hence, instead of lecturing the whole time, it would be a good idea if the moderator can slice the hour into 2 or 3 segments, and present the key idea at the beginning of each segment, and at the end, without forgetting to make transitions, and let participants know what they are about to learn in the next segment.

Make it visual!

Take advantage of the whiteboard tools, and do not be afraid to make the whiteboard messy, the messier the better! Use color, graphics, highlights, pointers, sound, animation, and other media to make the venue more appealing and fun.

Include Activities/Group Work

Include activities and/or group work between the lectures segments mentioned above (individual or group activities through breakout rooms or private chatting). The moderator will have to prepare activities, group work and applications for each segment of the session. This way, the participants are required to be attentive, follow the instructions, and apply what they learn in the segment by doing some exercises that reinforce what they just learned.

Collaborative work

Most of the synchronous venues offer the breakout rooms features, where you can move the participants into breakout rooms and assign problems to be done collaboratively. Give them plenty of instruction and time to interact, and keep checking on them for questions or feedback. Breakout rooms are best used for collaboration and group activities. Students introduce each other, work on homework, problems, projects, research, brainstorming, and other related activities in small groups and then share the materials from the group sessions with the rest of the students.

Design breaks during the session

Give at least a 10-minute break for a 90-minute program (Hoffman, 2000, para.13). In some synchronous venues, a "step away" tool indicates when participants are away from their computers, and when they are back. This tool might save time, instead of calling the students' names and waiting for their answers.

Be prepared to manage crises

(Finkelstein, 2006, p.91). When people interact in real time, unanticipated and unpredictable learning can happen, despite the planned event. Hence the facilitator should be able to manage unforeseen issues that may arise and adjust to the changes. One way is to acknowledge the problem, share it with the learners, ask them for help and patience, and mostly, you should remain calm and transparent, and in control.

Be creative. Figuratively, if a hat suddenly falls in the vclass, instead of panicking, just acknowledge it, neutralize it, pick it up and move on. Having a sense of humor helps in the online synchronous venue!

Accommodate the learners' styles and preferences

During the live session, the facilitator can give options to the learners by providing multiple channels of communication to the learners, so that the learner uses the channels of communication that suit his/her learning style and preference. In order to accommodate visual, auditory or kinesthetic/tactile learner's styles and preferences, it is important to implement verbal and written instructions, multimedia, voice, chat, whiteboard, emoticons, group work / individual work, activities in the live session and outside, games and simulations, availability of profiles, etc. For example, a learner might be comfortable chatting only rather than talking on the microphone.

Promote active learning strategies and critical thinking

Actively engaging the learners and getting them involved in higher-order thinking such as analysis, synthesis and evaluation is the best way to achieve success and satisfaction in the learning environment, and it can be successfully implemented in a live online venue. Some examples of active learning strategies online, as guided lectures, role playing, debates, discussions, games and simulations and breakout rooms are found in the website created by Nehme, Schullo & Adams (2006).

Assess online

Classroom assessment is one method of inquiry within the framework of Classroom Research. Its purpose is to provide the facilitator and the learners with information and insights needed to improve teaching effectiveness and learning quality, provide the learners with informative and instant feedback on their progress and the moderator with a way to meet the students' expectations and to gauge the student learning. The synchronous venue offers many types of assessment tools, such as polling, online quizzes, dialogue, delivery of written assignments, discussions (written/oral) through Audio or chat, self/course evaluation and surveys through the whiteboard or file transfers, and through the questioning model among others. Questioning is an essential pedagogical practice that supports constructivism and active learning strategies, and it dates back for thousands of years (Socratic method). In designing online assessments, you should consider the objectives and the learners' characteristics.

Record your vclass

Recording allows participants to review a class for improving understanding in case they missed it, or to keep a library of recorded learning objects. It is worth noting here that in some Synchronous venues, one can print and save the whiteboard screens and the chatting area. The file transfer that you are able to send in a vclass can be saved as well during the recorded sessions.

CONCLUSION

From the sociocultural perspective, the continual development of learning a subject is a by-product of mediation and socialization into a community of learners, through which a novice develops into a competent member of the learning community. The synchronous online tool is the mediator and the social arena is achieved through the different types of communication, collaboration, cooperation and interaction that happen among the moderator and the learners online. Learning can be enhanced and success can be achieved in a live online classroom, not only by knowing how to use²⁴⁷ the tools effectively, but by teaching from the heart, by being a learner as well, by

building a trustworthy partnership with your students, by thinking outside the box, by being ready and courageous to try new approaches and techniques online and by involving the students in that process. We can succeed in everything in life, once we put our heart into it. Good Luck!

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