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| **Synchronous**  Learning that involves group of students engaging at the same time | **Benefits** | **Challenges** |
| Student Experience | * Live--Real time interactions with instructors and fellow students * Opportunity for discussion of complex issues * Motivation to complete assignments | * Scheduling is an issue to deal with different regions and across time zones * Low enrollment due to scheduling issues which affect cost |
| Instructional Delivery | * Instructor-centered approach * Similar to face-to-face teaching models such as online polling, web browsing, task-based collaboration | * Instructors deal with multiple (often new) technologies without regular professional development |
| Technological Implications | * Audio/video conferencing * Online Chat * Instant Messaging * White Boards | * Costly Learning Management Systems (LMS) that require high network capacity |
| Learning Outcomes | * Create opportunities for engagement and allow for instant feedback | * More research needed on improving student performance in online courses for cost effectiveness |

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| **Asynchronous**  Student-centered learning method that uses online resources outside the constraints of time and place among people. | **Benefits** | **Challenges** |
| Student Experience | * Learn at own time and pace * Mostly simple content * More time to reflect because sender does not expect immediate response | * Cannot get instant feedback because instructor is not present at a given time * Must find time or means to communicate for group activities |
| Instructional Delivery | * Learner-centered approach * Access materials when convenient * Formats includes email, discussion boards and blogs | * Costly for first-time development, but long-term is cheaper than synchronous |
| Technological Implications | * Cost effective * Computer Based Instruction (CBI) * Recorded Webinars * Games * Videos | * Need to have technological tools * Slower data transfer rate (especially in rural areas) |
| Learning Outcomes | * Opportunity to consider complex issues * Great for non-traditional learners | * More hours of instructional preparation to measure student performance |