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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
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