Publications and Resources: HyFlex, Blended Synchronous, Blended Learning

HyFlex

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Research Articles & Books

Abdelmalak, M. M. M., & Parra, J. L. (2016). Expanding learning opportunities for graduate students with HyFlex course design. International Journal of Online Pedagogy and Course Design, 6(4), 19–37.

Beatty, B. (2020) *Hybrid-Flexible Course Design: Implementing student-directed hybrid classes* https://edtechbooks.org/hyflex

Beatty B. (2012). *HyFlex course design: The advantages of letting students choose the blend*. Retrieved from http://olc.onlinelearningconsortium.org/effective_practices/using-hyflex-course-and-design-process

Leijon, M., & Lundgren, B. (2019). Connecting physical and virtual spaces in a HyFlex pedagogic model with a focus on teacher interaction. *Journal of Learning Space*s; 1, 8. http://ls00012.mah.se/handle/2043/29362

Miller, J.B., Risser, M.D. & Griffiths, R.P. (2013). Student Choice, Instructor Flexibility: Moving Beyond the Blended Instructional Model. *Issues and Trends in Learning Technologies*, 1(1). https://journals.uair.arizona.edu/index.php/itet/article/view/16464/16485

Sowell, K., Saichaie, K., Bergman, J., & Applegate, E. (2019). High Enrollment and HyFlex: The Case for an Alternative Course Model. *Journal on Excellence in College Teaching*, 30(2), 5-28.

Talbert, R. (2020). Research report: Experiencing the hyflex model.
Robert Talbert, breakdowns of research papers on hyflex on blog, starting with a study done with a small class at University of Nebraska - Kearney:
https://rtalbert.org/research-report-experiencing-the-hyflex-model/

Websites and Articles

David Rhoads will have a chapter in one of his books in the coming months. On Thursday, May 14, New Teaching in Higher Ed podcast episode where I interview David Rhoads about Hyflex. https://teachinginhighered.com/309 (link goes live 05/14/20 at 5:00 AM PT)

EDUCAUSE (2010) "Seven things you should know about the HyFlex course model" https://library.educause.edu/resources/2010/11/7-things-you-should-know-about-the-hyflex-course-model

Lieberman, M. (2018) Introducing a New(-ish) Learning Mode: Blendflex/Hyflex. *Inside HigherEd.*

Inside Higher Ed article on "blendflex" (=hyflex) from 2018: https://www.insidehighered.com/digital-learning/article/2018/01/24/blendflex-lets-students-toggle-between-online-or-face-face

Hyflex implementation at Peirce College: https://www.peirce.edu/degrees-programs/ways-to-learn/peirce-fit https://www.youtube.com/watch?v=ukEd5UxwZKQ&feature=youtu.be

What To Expect in a HyFlex Course: A Faculty Handbook . (2017) Texas A&M University https://www.tamusa.edu/documents/aacsb/hyflex-faculty-handbook-2017.pdf

Hyflex (HELIX) Implementation at Harvard Division of Continuing Education: https://teach.extension.harvard.edu/helix

Maloney, E. and J. Kim (2020). Fall Scenario #13: A HyFlex Model: The challenge of flexibility. May 10. https://insidehighered.com/blogs/learning-innovation/fall-scenario-13-hyflex-model

Synchronous Blended / VTC

Blended Synchronous Learning Handbook, which is freely available for download from: http://blendsync.org/handbook . "The Handbook includes a Blended Synchronous Learning Design Framework that offers pedagogical, technological, and logistical recommendations for teachers attempting to design and implement blended synchronous learning lessons (see Chapter 14). It also includes a Rich-Media Synchronous Technology Capabilities Framework to support the selection of technologies for different types of learning activities (see Chapter 4), as well as a review of relevant literature, a summary of the Blended Synchronous Learning

Scoping Study results, detailed reports of each of the seven case studies, and a cross-case analysis."

FROM https://blendsync.org/publications

Bower, M., Dalgarno, B., Kennedy, G. E., Lee, M. J. W., & Kenney, J. (2015). Design and implementation factors in blended synchronous learning environments: Outcomes from a cross-case analysis. *Computers & Education, 86*(August), 1-17. [Available open access at http://dx.doi.org/10.1016/j.compedu.2015.03.006]

Bower, M., Kenney, J., Dalgarno, B., Lee, M. J., & Kennedy, G. E. (2014). Patterns and principles for blended synchronous learning: Engaging remote and face-to-face learners in rich-media real-time collaborative activities. *Australasian Journal of Educational Technology, 30*(3), 261-272. [Available open access at http://ascilite.org.au/ajet/submission/index.php/AJET/article/view/1697]

Bower, M., Kenney, J., Dalgarno, B., Lee, M.J.W. & Kennedy, G.E. (2013). Blended synchronous learning: Patterns and principles for simultaneously engaging co-located and distributed learners. In H. Carter, M. Gosper and J. Hedberg (Eds.), Proceedings of the 30th ASCILITE Conference. Sydney, Australia, 1st-4th December 2013. Available at: http://www.ascilite.org.au/conferences/sydney13/program/papers/Bower.pdf [Received the Best Paper Award at ASCILITE2013]

Bower, M., Kennedy, G. E., Dalgarno, B. Lee, M. J. W., Kenney, J., & de Barba, P. (2012). Use of media-rich real-time collaboration tools for learning and teaching in Australian and New Zealand universities. Proceedings of the 29th ASCILITE Conference. Wellington, New Zealand, 25-28th November 2012. Available at: http://www.ascilite.org.au/conferences/wellington12/2012/images/custom/bower%2c_matt_-_use_of_media.pdf [Nominated for Best Paper Award at ASCILITE2012]

Bower, M., Kennedy, G.E., Dalgarno, B., & Lee, M.J.W. (2011). Uniting on-campus and distributed learners through media-rich synchronous tools: A national project. Proceedings of the 28th ASCILITE Conference (pp. 150-155). Wrest Point Casino, Hobart, Australia, 4-7 December 2011. [View the presentation http://webconf.ltc.mq.edu.au/p23165390/]. [View the paper http://www.ascilite.org.au/conferences/hobart11/downloads/papers/Bower-concise.pdf]

Selected Presentations (also see workshops)

Bower, M., Kennedy, G. E., Dalgarno, B., Lee, M. J. W., & Kenney, J. (2013). BlendSync Webinar 4: The final phase (online webinar), 6th December, 2013. Recording available at https://webconf.ltc.mq.edu.au/p44itzqcppj.

Bower, M., Kennedy, G. E., Dalgarno, B., Lee, M. J. W., & Kenney, J. (2013). BlendSync Webinar 3: Experiences from the virtual field (online webinar), 25th July, 2013. Recording available at http://bit.ly/blendsyncw3recording.

Bower, M., Kennedy, G. E., Dalgarno, B., Lee, M. J. W., & Kenney, J. (2013). The second Blended Synchronous Learning Collaborator Network meeting (online presentation), 3rd April, 2013. Recording available at http://bit.ly/blendsyncw2recording.

Bower, M., Kennedy, G. E., Dalgarno, B., Lee, M. J. W., & Kenney, J. (2012). The inaugural Blended Synchronous Learning Collaborator Network meeting (online presentation), 3rd April, 2012. Recording available at http://webconf.ltc.mq.edu.au/p5cty6cn187/.

Al-Samarraie, H. (2019). A scoping review of videoconferencing systems in higher education: Learning paradigms, opportunities, and challenges. International Review of Research in Open and Distributed Learning, 20(3). https://www.erudit.org/en/journals/irrodl/1900-v1-n1-irrodl04799/1062525ar/abstract/

Bourdeau, D. T., Roberts, D., Wood, B., & Korioth, J. (2017). A study of video-mediated opportunities for self-directed learning in required core curriculum. International Journal of Educational Methodology, 3(2), 85. https://commons.erau.edu/publication/1081/

Harnish, R. J., Bridges, K. R., Sattler, D. N., Signorella, M. L., & Munson, M. (Eds.). (2018). The Use of Technology in Teaching and Learning. Retrieved from the Society for the Teaching of Psychology web site: http://teachpsych.org/ebooks/

Piotrowski, A., & Robertson, M. (2017). Engagement Across the Miles: Using Videoconferencing with Small Groups in Synchronous Distance Courses. Journal on Empowering Teaching Excellence, 1(2), 8. https://digitalcommons.usu.edu/jete/vol1/iss2/8/

Sweeten, T.L. (2015). Interactive videoconferencing versus the face-to-face biology classroom: Understanding student attitudes and behaviors." In A. Blackstock & N. Straight (Eds.), *Interdisciplinary Approaches to Distance Teaching: Connecting Classrooms in Theory and Practice* (39–51). Routledge.

Teel, J., & Cordie, L. (2017, May). Digital Technologies in the Synchronous Classroom: Utilizing Video Conferencing to Create Effective Blended Learning. In Global Conference on Education and Research (GLOCER 2017) (Vol. 5). https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1009&context=anaheipublishing#page=96

Multi-Access Learning

Irvine, V., Code, J., & Richards, L. (2013). Realigning higher education for the 21st-century learner through multi-access learning. MERLOT Journal of Online Learning & Teaching, 9(2), 172–186.

Irvine, V. (2009). *The Emergence of Choice in "Multi-Access" Learning Environments: Transferring Locus of Control of Course Access to the Learner*. 746–752. https://www.learntechlib.org/primary/p/31583/

Blended Learning, General

Research Articles & Books

Bralić, A., & Divjak, B. (2018). Integrating MOOCs in traditionally taught courses: achieving learning outcomes with blended learning. International Journal of Educational Technology in Higher Education, 15(1), 2.

Dziuban, C., Graham, C.R., Moskal, P.D. et al. Blended learning: the new normal and emerging technologies. Int J Educ Technol High Educ 15, 3 (2018). https://doi.org/10.1186/s41239-017-0087-5

Edelstein, S. and Edwards, J. (2005). Assessment Table. From "If you build it, they will come: Building learning communities through threaded discussions." In Teaching Introduction to Sociology as a Hybrid Course. Washington, DC.: American Sociological Association, p. 66. See Appendix 1

Elsenheimer, J. (2006). Got tools? The blended learning analysis and design expediter. *Performance Improvement*, 45(8), 26. https://onlinelibrary.wiley.com/doi/abs/10.1002/pfi.4930450806

Feifei Han, Robert A. Ellis,. (2019) Identifying consistent patterns of quality learning discussions in blended learning, *The Internet and Higher Education*, 40, 12-19.

Galvis, Á.H. Supporting decision-making processes on blended learning in higher education: literature and good practices review. *Int J Educ Technol High Educ* **15,** 25 (2018). https://doi.org/10.1186/s41239-018-0106-1

Graham, Charles. (2019). 2019 HandbookDE Current Research in BL. *Handbook of Distance Education*, Routledge.

Horn, M.B. and Staker, H. (2014) Blended Learning Definitions. From *Blended: Using Disruptive Innovation to Improve Schools.* San Francisco: Jossey-Bass
https://www.christenseninstitute.org/blended-learning-definitions-and-models/
https://doi.org/10.1016/j.iheduc.2018.09.002.
https://www.igi-global.com/book/emerging-techniques-applications-blended-learning/227588

Karoglu, A. K., Kiraz, E., & Özden, M. Y. (2014). Good practice principles in an undergraduate blended course design. Egitim ve Bilim, 39(173).
https://pdfs.semanticscholar.org/ea50/23ca058394ca0508f33a51cf512f311f1129.pdf

Kerzic, D., Tomazevic, N., Aristovnik, A., & Umek, L. (2019). Exploring critical factors of the perceived usefulness of blended learning for higher education students. *PLoS ONE*, 14(11), e0223767. Retrieved from
https://link-gale-com.libproxy.clemson.edu/apps/doc/A606436408/OVIC?u=clemson_itweb&sid=OVIC&xid=685a3047

Kich, M. (2016). Blended learning. In S. Danver (Ed.), *The SAGE encyclopedia of online education* (pp. 138-142). Thousand Oaks,, CA: SAGE
http://sk.sagepub.com.libproxy.clemson.edu/reference/the-sage-encyclopedia-of-online-education/i2228.xml/true

Koh, J. H. L. (2019). Four Pedagogical Dimensions for Understanding Flipped Classroom Practices in Higher Education: A Systematic Review. *Educational Sciences: Theory & Practice*, 19(4), 14–33. https://doi-org.libproxy.clemson.edu/10.12738/estp.2019.4.002

Koskinen, M. (2018). Understanding the needs of adult graduate students: An exploratory case study of a HyFlex learning environment. (Dissertation)

Kyei-Blankson, L, Ntuli, E., Nur-Awaleh, M.A. (2020) *Emerging Techniques and Applications for Blended Learning in K-20 Classrooms*. Hershey, PA:IGI Global.

Kyei-Blankson, L., Godwyll, F., Nur-Awaleh, M.A. (2014). Innovative blended delivery and learning: exploring student choice, experience, and level of satisfaction in a HyFlex course. International Journal of Innovation and Learning, 16(3), 243–252.

Lakhal, S., Khechine, H., &Pascot, D. (2014). Academic students' satisfaction and learning outcomes in a HyFlex course: Do delivery modes matter? In Proceedings of E-Learn World conference on E-learning in corporate, government, healthcare, & higher education (pp. 1936–1944)

le Roux, I., Nagel, L. (2018). Seeking the best blend for deep learning in a flipped classroom – viewing student perceptions through the Community of Inquiry lens. Int J Educ Technol High Educ 15, 16. https://doi.org/10.1186/s41239-018-0098-x

Malcyzk, B. R. (2019). Introducing Social Work to HyFlex Blended Learning: A Student-centered Approach. Journal of Teaching in Social Work, 39, 414-428.

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McCutcheon, K., Lohan, M., Traynor, M., & Martin, D. (2015). A systematic review evaluating the impact of online or blended learning vs. face-to-face learning of clinical skills in undergraduate nurse education. Journal of advanced nursing, 71(2), 255-270.

Mirriahi, N., Joksimović, S., Gašević, D., & Dawson, S. (2018). Effects of instructional conditions and experience on student reflection: a video annotation study. *Higher Education Research & Development*, 37(6), 1245-1259. https://www-tandfonline-com.libproxy.clemson.edu/doi/full/10.1080/07294360.2018.1473845

Mirzaie, H., & Grizzie, I. (2016). One size doesn't fit all: HyFlex lets students choose. EDUCAUSE Review.

Sahin, M. (2016). The flipped approach to higher education : designing universities for today's knowledge economies and societies. Bingley, UK : Emerald Group Publishing Limited. EBOOK at Clemson Libraries

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Tselios, N., Daskalakis, S., & Papadopoulou, M. (2011). Assessing the acceptance of a blended learning university course. Educational Technology & Society, 14(2), 224+. Retrieved from https://link-gale-com.libproxy.clemson.edu/apps/doc/A262885062/AONE?u=clemsonu_main&sid=AONE&xid=bfae735c

Vaughn, N.D. Vaughan, (2013) *Teaching in blended learning environments : creating and sustaining communities of inquiry.* Edmonton, Alberta : AU Press. Ebook in Cooper Library

Websites, Articles

6 Models of Blended Learning (2013).
https://www.dreambox.com/blog/6-models-blended-learning
On % of driver modality

Blended Learning Libguide http://dal.ca.libguides.com/clt/teachinglearning/elearning

A Step-By-Step Guide to Designing Blended Online Courses (2019)
https://ethinkeducation.com/blog/step-by-step-guide-designing-blended-online-courses/

Blended & Hybrid Learning (2019)
https://libguides.com.edu/blended

Blended Learning Toolkit (UCF)
https://blended.online.ucf.edu/

Blended Synchronous, HyFlex, Blended Learning Libguide (2020) Clemson University.
https://clemson.libguides.com/blendedlearning

Everheart, F.J. (2018) TEACH Session: Blended Learning. Virginia Tech.
https://www.teach.vtc.vt.edu/wp-content/uploads/2018/10/20181022-TEACH-Blended-Learning.pdf

Millichap, N. & K. Vogt. (2012). Blocks for College Completion: Blended Learning. Report.
https://library.educause.edu/resources/2012/12/building-blocks-for-college-completion-blended-learning

Flipped Learning

Research Articles & Books

Bernard, J. S., & Ghaffari, M. (2019). Undergraduate nurse educators' transition to flipped classroom: A qualitative study. *Nursing Forum*, 54(3), 461–467.
https://doi-org.libproxy.clemson.edu/10.1111/nuf.12355

Chang, S. C., & Hwang, G. J. (2018). Impacts of an augmented reality-based flipped learning guiding approach on students' scientific project performance and perceptions. *Computers & Education*, 125, 226-239.

Davila, Y., Reyna, J., Huber, E., & Meier, P. (2017, August). Enhancing engagement in flipped learning across undergraduate Science using the Flipped Teacher and Flipped Learner Framework. In *Proceedings of The Australian Conference on Science and Mathematics Education* (formerly UniServe Science Conference) (p. 40).

Holman, R., & Hanson, A. D. (2016). Flipped Classroom Versus Traditional Lecture: Comparing Teaching Models in Undergraduate Nursing Courses. *Nursing Education Perspectives* (Wolters Kluwer Health), 37(6), 320–322. https://doi-org.libproxy.clemson.edu/10.1097/01.NEP.0000000000000075

Hu, C. F., & Hsu, F. F. (2018). The Value of Adding a Flipped Learning Component to a Humanities Course in Higher Education: Student Perception and Performance. *Taiwan Journal of TESOL*, 15(2), 1-32.

Karabulut‑Ilgu, A., Jaramillo Cherrez, N., & Jahren, C. T. (2018). A systematic review of research on the flipped learning method in engineering education. *British Journal of Educational Technology*, 49(3), 398-411.

Lee, J., Lim, C., & Kim, H. (2017). Development of an instructional design model for flipped learning in higher education. *Educational Technology Research and Development*, 65(2), 427-453.

Reidsema, C., Kavanagh, L., Hadgraft, R., & Smith, N. (2017). *The Flipped Classroom. Practice and Practices in Higher Education*. Ed. Springer. http://libcat.clemson.edu/record=b4013578

Thompson, G. A., & Ayers, S. F. (2015). Measuring Student Engagement in a Flipped Athletic Training Classroom. *Athletic Training Education Journal* (Allen Press Publishing Services Inc.), 10(4), 315–322.

Tomas, L., Doyle, T., & Skamp, K. (2019). Are first year students ready for a flipped classroom? A case for a flipped learning continuum. *International Journal of Educational Technology in Higher Education*, 16(1), 5.

Websites:

Flipping the Classroom, Vanderbilt University
https://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/

Myths and Facts About Flipped Learning, EDUCause
https://er.educause.edu/articles/2017/9/myths-and-facts-about-flipped-learning

Appendices

Criteria	Excellent	Good	Average	Below Average	Poor
Promptness and Initiative	Consistently responds to postings in less than 24 hours; postings throughout posting period and not just during the last several hours	Responds to most postings within a 24-hour period; requires occasional prompting to posting	Responds to most postings several days after the initial discussion; limited initiative; frequently postings at the last minute	Does not respond to most postings; rarely participates freely	No participation
Delivery of Posting	Consistently uses grammatically correct postings with rare misspellings	Few grammatical or spelling errors are noted in postings	Errors in spelling and grammar evidenced in several postings	Utilizes poor spelling and grammar in most postings; postings appear "hasty"	
Relevance of Posting	Consistently postings topics related to the discussion topic; cites additional references related to topic, either from the text or other sources; obvious and multiple connections to the course material	Frequently postings topics that are related to the discussion content; prompts further discussion of the topic; some connections to the course material	Occasionally postings off topic; most postings are short in length and offer no further insight into the topic; minimal and/or unclear connections to the course material	Postings topics which do not relate to the discussion content; makes short or irrelevant remarks; no connection to the course material	
Expression Within the Posting	Expresses opinions and ideas in a clear and concise manner with obvious connection to topic; uses evidence from readings	Opinions and ideas are stated clearly with occasional lack of connection to topic; little integration of reading material.	Unclear connection to topic evidenced in minimal expression of opinions or ideas	Does not express opinions or ideas clearly; no connection to the topic	
Contribution to the Learning Community	Aware of needs of community; frequently attempts to motivate the group discussion; presents creative approaches to topic	Frequently attempts to direct the discussion and to present the relevant viewpoints for consideration by the group; interacts freely	Occasionally makes meaningful reflections on group's efforts; marginal effort to become involved with group	Does not make effort to participate in learning community as it develops; seems indifferent.	