

## **A Hybrid Learning for Building Academic Resilience in Student with Disabilities During Pandemic**

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### **Abstract**

This literature review highlights the condition of the education after pandemic attacks our world. In particular, this has had a huge impact on students with disabilities who even struggled to achieve success in learning, long before the pandemic. Therefore, the world of education is faced with the reality of being able to answer this challenge. The challenge making humans must realize that there is no guarantee of the normal situation, as usual, can be realized again. It takes the ability to constantly adjust under any circumstances. Although it is undeniable some factors become contributors to support learning success in students with special needs. But it seems this study is still less in Indonesia, especially if it is associated with world changes after covid-19. Resilience in an academic context exists through a hybrid learning approach or also known as blended learning. This new challenge opens up a point of view to strengthen the link between hybrid learning approaches and the realization of resilience in order to be of great concern, especially to accelerate changes in the learning process during pandemic.

**Keywords:** hybrid learning; academic resilience; disability; pandemic

### **Introduction**

It cannot be denied, raising a child with special needs is different from a normal child. Firstly, parents must prepare mentally and increase knowledge in this regard. As Wills says: "Raising an intellectually disabled child has a stressful impact on parents, but there are facts that show regarding children have brought many positive changes in themselves and their families, such as an increased sense of personal strength and confidence, changing priorities, greater appreciation for life, enjoyment of a child's achievements, an increase in faith/spirituality, more meaningful relationships, and the positive effects that children having on society at large". In another way, the role of parents in raising children with special needs is essentially significant.

Children with special needs have the right to interact in normal conditions if conducted by proper treatment. This is in line with the government's program that children with special needs have the same rights as other children, can live independently, and can achieve by following their interests and potentials. Therefore, parents, families, and communities must participate in fulfilling the rights of children with special needs in all aspects of life, such as socializing, recreation, and doing other activities aimed at introducing children with special needs to live outside the home. Based on this, providing facilities to live like a normal child becomes one of the responsibilities of the system around children with special needs, including getting a good education.

But since the covid-19 pandemic hits the world, educational activities are messy and constantly transforming according to the situation. It is undeniable that learning difficulties during pandemics are felt even by the majority of students with normal conditions. But greater challenges have been experienced by many students with disabilities. The data taken in 2018 shows that the educational challenges among students with disabilities are still large, for example, 140,000 children with disabilities aged 7-18 years do not obtain an education. Moreover, along with pandemic attacks, these efforts are much extra than before. Students with disabilities are unable to access distance

learning due to internet facilities, technology, and special conditions that have accompanied their circumstances long before the pandemic.<sup>1</sup>

Changes in learning situations due to pandemics cause stress among students. The reasons are coming from various factors causing psychological disorders, such as pressure, decreased learning motivation, excessive demands, and mental fatigue experienced by students at the time of adjustment due to sudden changes. The efforts to overcome academic stress can be done by students themselves by developing resilience. Resilience is the process of adjusting a person who can handle the difficulties, traumas, tragedies, or threats of significant sources of stress well. The efforts to develop resilience can be done by focusing on four core components, namely connection, fitness, common sense empowered to survive and learn from difficult and traumatic experiences.<sup>2</sup> Academic resilience also refers to an individual's ability to survive, rise, and adjust to difficult and stressful conditions in the academic field.<sup>3</sup> Thus, resilience in the academic field can also mean the process of surviving as a result of individual choices when under severe pressure in an academic context.

Various solutions are present to help the learning process that is following by current reality. One of them, the hybrid learning approach as an alternative solution that has been applied for the latest past period. Hybrid learning is also targeting inclusive schools for students with disabilities inside. This condition encourages multiple educational institutions to take advantage of hybrid learning approaches, including education involving students with disabilities.

Therefore, there are needs to be a more elaborative study explanation to accommodate the state of education with hybrid learning that touches students with disabilities to achieve success in learning without discrimination. Specifically, through this study, either student with disabilities can both effectively and flexibly maintain resilience or to obtain maximum learning outcomes.

Hybrid learning commonly known as blended learning which is itself is a combination of two regions both attention of education and educational technology. Blended learning is a mixture of online learning and face-to-face delivery. This approach uses resources optimally to improve student's learning outcomes, as well as to address important institutional issues.<sup>4</sup>

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<sup>1</sup> UNICEF, "Menuju Dunia Pasca COVID-19 Yang Berkelanjutan Serta Inklusif Dan Ramah Bagi Penyandang Disabilitas | UNICEF Indonesia," accessed September 27, 2021, <https://www.unicef.org/indonesia/id/stories/menuju-dunia-pasca-covid-19-yang-berkelanjutan-serta-inklusif-dan-ramah-bagi-penyandang>.

<sup>2</sup> Nila Zaimatus Septiana, "Hubungan Antara Stres Akademik Dan Resiliensi Akademik Siswa Sekolah Dasar Di Masa Pandemi Covid-19," *SITTAH: Journal of Primary Education* 2, no. 1 (April 13, 2021): 49–64, <https://doi.org/10.30762/sittah.v2i1.2915>.

<sup>3</sup> Paundra Kartika Permata Sari and Endang Sri Indrawati, "Hubungan Antara Dukungan Sosial Teman Sebaya Dengan Resiliensi Akademik Pada Mahasiswa Tingkat Akhir Jurusan X Fakultas Teknik Universitas Diponegoro," *Jurnal EMPATI* 5, no. 2 (January 30, 2017): 177–82.

<sup>4</sup> Manjot Kaur, "Blended Learning - Its Challenges and Future," *Procedia - Social and Behavioral Sciences*, 3rd World Conference on Learning, Teaching and Educational Leadership, 93 (October 21, 2013): 612–17, <https://doi.org/10.1016/j.sbspro.2013.09.248>.

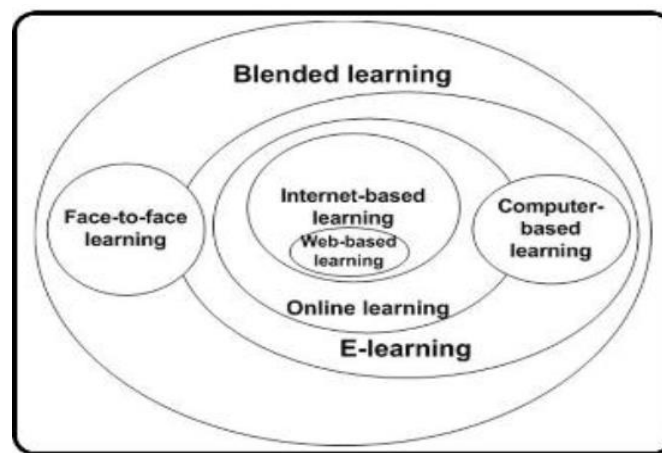


Figure 1. Blended Learning/ Hybrid Learning Component<sup>5</sup>

Some of the criteria in blended learning/hybrid learning, including 1) Learning that combines various forms of delivery, educational models, learning styles, and various technology-based media; 2) As a blend of face-to-face education, self-study, and self-study over the internet; 3) Learning is supported by an effective combination of delivery, learning, and teaching styles; 4) Educators and parents of students have the same important role, educators as facilitators, and parents as supporters.<sup>6</sup>

The principles related to the above problems as well as the important role of hybrid learning amid during in unstable educational conditions brings to several questions of research focusing on this study:

1. How is the hybrid learning process in creating a learning success of students with disabilities?
2. How is academic resilience formed through hybrid learning in students with disabilities?
3. What are the factors that can be a contributor to the application of hybrid learning in students with disabilities?

## Method

This study uses a scoping review approach that is one part of the literature review. The use of scoping reviews is selected to attain searches from previous sources with topics approaching or similar. All sources are taken from empirical research results presented in journal articles. The source used is a source from 2011 to 2021, but there is one source that uses journal articles in 2002 because having the relevancy. The method overview of scoping review refers to some of the stages below:

- a. Literature search

All sources are collected from various journal publishers using the google scholar search engine or referring to the journal publisher or website. The list of journal articles is international and national journals. The international journal publishers referenced are Researchgate, Sciencedirect, AACE, Chulalongkorn University Printing House, British Medical Journal Publishing Group, Springerlink, Cambridge Core, Cambridge University Press, Association on Higher Education and Disability, HHS Public Access, NCBI, DOAJ, CCSenet, Mecs-Press, Sage Publication Inc, Redfame Publishing Inc, IJSTR, Taylor and Francis, and SERU Consortium. While the national journal publisher comes

<sup>5</sup> Wendhie Prayitno, "Implementasi Blended Learning Dalam Pembelajaran Pada Pendidikan Dasar Dan Menengah," *Artikel LPMP D.I. Yogyakarta*, 2015, 1–14.

<sup>6</sup> Prayitno.

from several universities for instance: UNESA, UM, UNIPASBY, UNS, UNNES, UNPAD, UNJA, and IAIN Kudus.

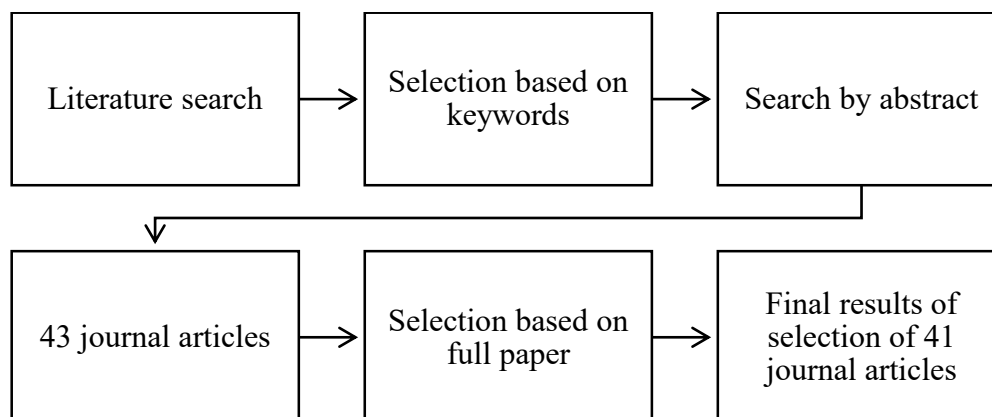


Figure 2. Literature Selection Stage

b. Selection based on keywords

The keywords used to search the journal are "hybrid learning", "blended learning", "student with disabilities", "academic resilience", "challenge of learning for student with disabilities", "learning challenges during pandemics", "the factors affecting learning success for the students with disabilities", "students with special needs", and "inclusive education".

c. Search by abstract

All articles found based on keywords are selected based on abstract, the suitable articles will enter to the reference management platform and heading to the full version download process. While the inappropriate will be ignored even if the keyword has been appropriate. In the end, 43 journal articles were obtained in full paper form.

d. Final selection

For reaching the appropriate analysis, the entire articles in full paper form are adjusted again based on the content contained in them. As a result, it was found 2 articles that did not match with the purpose of the exploration of the study. The final decision making to only take 41 journal articles and would go to the next step.

## Result

The process of analysis refers to categorization according to journal sources. This study presented two types of analysis results tables. The table of analysis results are obtained from each empirical research result analysis from selected articles. After completion, it turns to the synthesis process to take crucial points in answering previously research questions. This categorization process itself aims to see the dynamics among various journals on the topics discussed. This process is also expected to be one of the efforts to see the uniqueness in each literature developed in each year based on two different conditions both generally in the world and specifically in Indonesia. The results of the analysis from various journals were sorted from the earliest journal article publication year to articles published this year for investigating the development of hybrid learning dynamics in students with disabilities from time to time both domestic and overseas phenomena.

As for new additional information, the development in the discussion of literature from year to year does not show significant developments in terms of results or changes standing out as a form of evaluation from preceding research. It can be found in both international and national journal articles.

Table 1. Results of Literature Analysis Based on International Journal Articles

Journal	Author	Year	Analysis
Journal of Developmental and Physical Disabilities	Tali Heiman	2002	Mental resilience such as trust and optimism on the parents' side become the biggest motivation for parents of students with special needs. To survive during of changes that are difficult to predict. <sup>7</sup>
Journal of Postsecondary Education and Disability	Michael Humphrey, Lee Woods, and Linda Huglin	2011	Interaction with teachers and staff aspects becomes a key factor in learning success with people with disabilities. <sup>8</sup>
Hershey: IGI Global	Charles Dziuban et al.	2011	Improvements of the implementation of blended learning in line with adequate effort and time. <sup>9</sup>
International Journal of Modern Education and Computer Science	Asif Irshad Khan et al.	2012	Hybrid learning promises to gain the required learning experience and better when compared to the online learning approach. <sup>10</sup>
Scholar UTCC	Panuchart Bunyakiati and Pajika Voravittayathorn	2013	Innovation in hybrid learning is a challenge in every country. In Thailand the application of UTCC based on educational innovation in the technological era is one of the important systems considering learning success in students with disabilities. <sup>11</sup>
Research In Developmental Disabilities	Tina Taylor Dyches et al.	2013	There is a moderate relationship between positive parenting attributes and child outcomes. <sup>12</sup>
Asian Social Science	Chunqin Zhang	2013	The use of the internet for learning in China shows that teachers have a positive attitude towards using the internet in the teaching and

<sup>7</sup> Tali Heiman, "Parents of Children with Disabilities: Resilience, Coping, and Future Expectations," *Journal of Developmental and Physical Disabilities* 14, no. 2 (June 1, 2002): 159–71, <https://doi.org/10.1023/A:1015219514621>.

<sup>8</sup> Michael Humphrey, Lee Woods, and Linda Huglin, "Increasing Faculty Awareness of Students with Disabilities: A Two-Pronged Approach," *Journal of Postsecondary Education and Disability* 24, no. 3 (2011): 255–61.

<sup>9</sup> Charles Dziuban et al., "Blended Courses as Drivers of Institutional Transformation," *Blended Learning across Disciplines: Models for Implementation*, 2011, 17–37, <https://doi.org/10.4018/978-1-60960-479-0.ch002>.

<sup>10</sup> Asif Irshad Khan et al., "International Journal of Modern Education and Computer Science (IJMECS)," *International Journal of Modern Education and Computer Science (IJMECS)* 4, no. 9 (n.d.): 23.

<sup>11</sup> Panuchart Bunyakiati and Pajika Voravittayathorn, "Applying UTCC Hybrid Learning in the Designing of a Learning Framework for Students with Disabilities and High-Potential Students," 2013, <https://scholar.utcc.ac.th/handle/6626976254/360>.

<sup>12</sup> Tina Taylor Dyches et al., "Positive Parenting of Children with Developmental Disabilities: A Meta-Analysis," *Research in Developmental Disabilities* 33, no. 6 (November 1, 2012): 2213–20, <https://doi.org/10.1016/j.ridd.2012.06.015>.

			learning process which is also seen as effective to apply to students. <sup>13</sup>
Anveshanam - The Journal Of Education	Dr Nimrat Kd Khandpur	2014	This case requiring the role of parents, it also requires teachers to increasingly understand technology. This technology is known in the form of Information and Communication Technology (ICT) of the teaching-learning process. Teachers should be "literate" of ICT and integrate ICT resources of the teaching and the learning process. <sup>14</sup>
Journal of Special Education Technology	Jesse R. Pace and Daryl F. Mellard	2016	The success component in blended learning is no different from face to face delivery, even if added from some broader aspect. <sup>15</sup>
International Journal Of Research In Education And Science	Simin Ghavifekr and Wan Athirah Wan Rosdy	2016	Integration of Information, Communication, and Technology (ICT) will help teachers for global needs replace traditional teaching methods with technology-based teaching and learning tools and facilities. <sup>16</sup>
Blurring the Boundaries Through Digital Innovation	A. I. Leonardo C.	2016	Increased student success and satisfaction is one of the positive impacts of blended learning. <sup>17</sup>
Journal of Education and Training Studies	Jennifer Hall Rivera	2017	Online learning doesn't always have a negative effect. In reality, cognitive understanding supplements are supported by the existence of online learning. While in learning assessment strengthened by blended learning. <sup>18</sup>
Journal of Online Learning Research	Rebecca Alvarado-Alcantar, Randa Keeley, and Breanna Sherrow	2018	Learners with all conditions emphasize the insignificant changes with online learning and hybrid learning. This tendency is due to the lack of learning support. <sup>19</sup>

<sup>13</sup> Chunqin Zhang, "A Study of Internet Use in EFL Teaching and Learning in Northwest China," *Asian Social Science* 9, no. 2 (January 28, 2013): p48, <https://doi.org/10.5539/ass.v9n2p48>.

<sup>14</sup> Dr Nimrat Kd Khandpur, "Imparting ICT Competency through Teacher Education," no. 1 (n.d.): 7.

<sup>15</sup> Jesse R. Pace and Daryl F. Mellard, "Reading Achievement and Reading Efficacy Changes for Middle School Students With Disabilities Through Blended Learning Instruction," *Journal of Special Education Technology* 31, no. 3 (September 1, 2016): 156–69, <https://doi.org/10.1177/0162643416660837>.

<sup>16</sup> Simin Ghavifekr and Wan Athirah Wan Rosdy, "Teaching and Learning with Technology: Effectiveness of ICT Integration in Schools," *International Journal of Research in Education and Science* 1, no. 2 (2015): 175–91.

<sup>17</sup> A. I. Leonardo C., "Blended Learning Approach: How Is the Learning Educational Paradigm Changing? Reflections and a Proposed Framework.," *Blurring the Boundaries Through Digital Innovation*, 2016, 49–58.

<sup>18</sup> Jennifer Hall Rivera, "The Blended Learning Environment: A Viable Alternative for Special Needs Students," *Journal of Education and Training Studies* 5, no. 2 (February 2017): 79–84.

<sup>19</sup> Rebecca Alvarado-Alcantar, Randa Keeley, and Breanna Sherrow, "Accessibility and Usability of Preferences in Blended Learning for Students with and without Disabilities in High School," *Journal of Online Learning Research* 4, no. 2 (2018): 173–98.

Australasian Journal of Special and Inclusive Education	Julie M. McMillan et al.	2018	Curriculum with technology-based interaction patterns that can be accessed easily takes an important part of the education in students with disabilities. <sup>20</sup>
Journal Of Intellectual Disabilities	Mohammad Ashori, Ghasem Norouzi, and Seyyedeh Somayyeh Jalil-Abkenar	2018	Parenting skills training will improve the mental health of children with intellectual disabilities mother so that planning positive parenting program training is essential. <sup>21</sup>
International Journal of Scientific and Technology Research	Rhesa T Hinampas et al.A., & Layosa, R. U.	2018	The impact of blended learning presents positive results on academic achievement, this can be seen when compared to the use of online learning. <sup>22</sup>
Journal of Interactive Media in Education	Victoria Pearson et al.	2019	Educational outcome inclusion does not experience differences seen from the background side of the learner. Focusing on the direction of education towards the development of inclusive schools becomes the main point that relies on the competence of educators. <sup>23</sup>
Primary Health Care Research & Development	M. Whiting et al.	2019	Interventions from professionals have a positive impact to reduce psychological conditions negatively that hit parents during the learning process in students with disabilities. <sup>24</sup>
Special and Inclusive Education Journal (SPECIAL)	Arsy Anggrellangi et al.	2020	The impact of blended learning is more supportive of learning success than conventional approaches in networking. <sup>25</sup>
International Journal of Disability,	Aleksandra Podsiadlik	2021	Learning difficulties for students with disabilities related to the acceptance, access,

<sup>20</sup> Julie M. McMillan et al., "Implementing the Australian Curriculum for Students With Disabilities in Specialist Settings: Teachers' Professional Learning Experiences and Preferences," *Australasian Journal of Special and Inclusive Education* 42, no. 2 (December 2018): 127–42, <https://doi.org/10.1017/jsi.2018.14>.

<sup>21</sup> Mohammad Ashori, Ghasem Norouzi, and Seyyedeh Somayyeh Jalil-Abkenar, "The Effect of Positive Parenting Program on Mental Health in Mothers of Children with Intellectual Disability," *Journal of Intellectual Disabilities* 23, no. 3 (September 1, 2019): 385–96, <https://doi.org/10.1177/1744629518824899>.

<sup>22</sup> Rhesa T Hinampas et al., "Blended Learning Approach: Effect On Students' Academic Achievement And Practical Skills In Science Laboratories" 7, no. 11 (2018): 8.

<sup>23</sup> Victoria Pearson et al., "Embedding and Sustaining Inclusive Practice to Support Disabled Students in Online and Blended Learning.," *Journal of Interactive Media in Education* 1 (June 14, 2019), <http://oro.open.ac.uk/61877/>.

<sup>24</sup> M. Whiting et al., "Enhancing Resilience and Self-Efficacy in the Parents of Children with Disabilities and Complex Health Needs," *Primary Health Care Research & Development* 20 (ed 2019), <https://doi.org/10.1017/S1463423619000112>.

<sup>25</sup> Arsy Anggrellangi et al., "Penguatan Aksesibilitas Model Blended Learning Pada Matakuliah Bahasa Indonesia Bagi Mahasiswa Tunarungu Dan Tunanetra," *Special and Inclusive Education Journal (SPECIAL)* 1, no. 1 (April 29, 2020): 25–30, <https://doi.org/10.36456/special.vol1.no1.a2085>.

Development, and Education			understanding of information, and mentoring accommodated online learning. <sup>26</sup>
Psychology and Education Journal	Mohd Norazmi bin Nordin, Faiza Iqbal, and Ruqia Safdar Bajwa	2021	Parents without the problems of facilities, finances, adequacy of knowledge, and ability are contributors to the success of continuous learning in students with disabilities. <sup>27</sup>
Research in Developmental Disabilities	Elsayed E. A. Hassanein, Taha R. Adawi, and Evelyn S. Johnson	2021	Quality family and good social support are more influential factors than resilience. This proves that external factors have a major influence on learning with students with disabilities compared to internal factors. <sup>28</sup>
Currents in Pharmacy Teaching and Learning	Sara A. Spencer, Angela C. Riley, and Sarah R. Young	2021	Accommodation in the implementation of educating students with disabilities must be minimal problems, especially as a forum for experiential learning approaches. <sup>29</sup>
Elsevier Public Health Emergency Collection	Lorico DS. Lapitan et al.	2021	Countries should design strategies to improve educational technology, build unranked educational resources on the internet, prepare digital teaching and learning resources, utilize free online learning resources, use mobile learning, use radio and television teaching, and a growing ICT infrastructure. <sup>30</sup>
Cambridge University Press	Sara Hanaei et al.	2021	Hybrid learning conditions become the most suitable approach that intersects with the form of face to face delivery and fully online. <sup>31</sup>

<sup>26</sup> Aleksandra Podsiadlik, "The Blended Learning Experiences Of Students With Specific Learning Difficulties: A Qualitative Case Study Located In One British Higher Education Institution," *International Journal of Disability, Development and Education* 0, no. 0 (February 18, 2021): 1–16, <https://doi.org/10.1080/1034912X.2021.1876217>.

<sup>27</sup> Mohd Norazmi bin Nordin, Faiza Iqbal, and Ruqia Safdar Bajwa, "Challenges Of Parents In The Implementation Of Teaching Process And Facilitation At Home During Movement Control Order For Students With Special Needs With Hearing Impairment In Malaysia," *Psychology and Education Journal* 58, no. 2 (March 1, 2021): 9188–93, <https://doi.org/10.17762/pae.v58i2.3633>.

<sup>28</sup> Elsayed E. A. Hassanein, Taha R. Adawi, and Evelyn S. Johnson, "Social Support, Resilience, and Quality of Life for Families with Children with Intellectual Disabilities," *Research in Developmental Disabilities* 112 (May 1, 2021): 103910, <https://doi.org/10.1016/j.ridd.2021.103910>.

<sup>29</sup> Sara A. Spencer, Angela C. Riley, and Sarah R. Young, "Experiential Education Accommodations for Students with Disabilities in United States Pharmacy Schools: An Exploratory Study," *Currents in Pharmacy Teaching and Learning* 13, no. 6 (June 1, 2021): 594–98, <https://doi.org/10.1016/j.cptl.2021.01.044>.

<sup>30</sup> Lorico DS. Lapitan et al., "An Effective Blended Online Teaching and Learning Strategy during the COVID-19 Pandemic," *Education for Chemical Engineers* 35 (April 1, 2021): 116–31, <https://doi.org/10.1016/j.ece.2021.01.012>.

<sup>31</sup> Sara Hanaei et al., "Emerging Standards and the Hybrid Model for Organizing Scientific Events During and After the COVID-19 Pandemic," *Disaster Medicine and Public Health Preparedness*, October 26, 2020, 1–6, <https://doi.org/10.1017/dmp.2020.406>.



Table 1. Results of Literature Analysis Based on National Journal Articles

Journal	Author	Year	Analysis
Wacana	Rini Sugiarti and Agung Santoso Pribadi	2013	Family support is a determinant contributor to the success of learning students with special needs compared to the interaction of friends. <sup>32</sup>
Artikel LPMP D.I. Yogyakarta	Prayitno	2015	Blended learning models continue to transform into diverse forms: web course models, web-centered courses, and web-enhanced courses. <sup>33</sup>
Jurnal Kajian Komunikasi	Nuryani Nuryani, Purwanti Hadisiwi, and Kismiyati El Karimah	2016	Communication skills become a supplement driving the learning success of children with special needs. <sup>34</sup>
Prosiding Ilmu Pendidikan	Jamilah Candra Pratiwi	2016	The role of government and its policies affects the competence of educators in dealing with children with special needs. <sup>35</sup>
Intuisi : Jurnal Psikologi Ilmiah	Satrio Budi Wibowo and Siti Nurlaila	2016	Success in the academic field in students with special needs comes from psychological factors manifested by self-esteem. <sup>36</sup>
Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan	Mujiono Mujiono, I. Nyoman Sudana Degeng, and Henry Praherdhiono	2018	Media and learning design that uses the principle of universal design for learning (UDL) can be an alternative media in inclusive education. <sup>37</sup>
Jurnal Teknodik	Arief Darmawan	2019	The skill base built on the educational system by involving conditions in networking encourages learners to be internally full of motivation and self-control, as well as externally have good interpersonal

<sup>32</sup> Rini Sugiarti and Agung Santoso Pribadi, "Analisis Faktor Yang Mempengaruhi Keberhasilan Belajar Siswa Slow Learner Di Sekolah Luar Biasa (Slb) Negeri Semarang," *Wacana* 5, no. 1 (2013), <https://doi.org/10.13057/wacana.v5i1.71>.

<sup>33</sup> Prayitno, "Implementasi Blended Learning Dalam Pembelajaran Pada Pendidikan Dasar Dan Menengah."

<sup>34</sup> Nuryani Nuryani, Purwanti Hadisiwi, and Kismiyati El Karimah, "Komunikasi Instruksional Guru Dan Siswa Anak Berkebutuhan Khusus Di Sekolah Menengah Kejuruan Inklusi," *Jurnal Kajian Komunikasi* 4, no. 2 (December 23, 2016): 154–71, <https://doi.org/10.24198/jkk.v4i2.6134>.

<sup>35</sup> Jamilah Candra Pratiwi, "Sekolah Inklusi Untuk Anak Berkebutuhan Khusus: Tanggapan Terhadap Tantangan Kedepannya," *Prosiding Ilmu Pendidikan* 1, no. 2 (March 8, 2016), <https://jurnal.fkip.uns.ac.id/index.php/pip/article/view/7725>.

<sup>36</sup> Satrio Budi Wibowo and Siti Nurlaila, "Self Esteem Pada Anak Berkebutuhan Khusus Di Sekolah Inklusi," *Intuisi : Jurnal Psikologi Ilmiah* 8, no. 1 (March 31, 2016): 30–34, <https://doi.org/10.15294/intuisi.v8i1.8556>.

<sup>37</sup> Mujiono Mujiono, I. Nyoman Sudana Degeng, and Henry Praherdhiono, "Pengembangan Pembelajaran Sistem Blended Berbasis Universal Design for Learning untuk Kelas Inklusif," *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan* 3, no. 6 (June 1, 2018): 758–63, <https://doi.org/10.17977/jptpp.v3i6.11163>.

			relationships. Innovation creates a variety of blended learning models, such as rotation model, flexible model, self-blending model, enriched virtual model. <sup>38</sup>
Jurnal Vidya Karya	Dini Noor Arini	2019	The role of blended learning in students with special needs creates a good positive perception for the continuation of learning afterward. <sup>39</sup>
JP (Jurnal Pendidikan) : Teori dan Praktik	Ilham Saifudin and Wiwik Suharso	2020	Innovation and learning media in Indonesia are still low to accommodate the learning needs of children with special needs. <sup>40</sup>
Digilib UNS	Dian Febri Kuswardani	2020	Policies consisting of standards and objectives, relationships between organizations, and dispositions of implementers become other driving wheels in achieving the success of students with disabilities. <sup>41</sup>
Elementary Islamic Teacher Journal	Hamidaturroh mah Hamidaturroh mah and Tri Mulyani	2020	Strategies for inclusion primary schools are important to emphasize to find suitable patterns to apply. However, this learning strategy must still be in a harmony with assistance to access learning. 5M strategy ((1) humanizes relationships, (2) understands concepts, (3) builds sustainability, (4) chooses challenges, (5) empowers context for students into a form of innovation that continues to be developed. <sup>42</sup>
Jurnal Studi Guru dan Pembelajaran	Amelia Rizky Idhartono	2020	ASIK (Alternative, Strategy, Innovative, and Communicative) learning systems can be an alternative approach to learning for students with special needs. The type of hybrid learning that will be applied to educational institutions still adjusts economic conditions

<sup>38</sup> Arief Darmawan, "Pengaruh Pendekatan Blended Learning Menggunakan Portal Rumah Belajar Terhadap Hasil Belajar Ipa the Effect of Blended Learning Approach By Utilizing Rumah Belajar Portal on the Learning Outcomes of Integrated Science," *Jurnal Teknodik* 17, no. September (2019): 065–079, <https://doi.org/10.32550/teknodik.v17i3.562>.

<sup>39</sup> Dini Noor Arini, "Persepsi Mahasiswa Berkebutuhan Khusus Terhadap Blended Learning Dalam Pengajaran Bahasa Inggris," *Vidya Karya* 34, no. 2 (January 2, 2020): 132–39, <https://doi.org/10.20527/jvk.v34i2.7577>.

<sup>40</sup> Ilham Saifudin and Wiwik Suharso, "Pembelajaran E-Learning, Pembelajaran Ideal Masa Kini Dan Masa Depan Pada Mahasiswa Berkebutuhan Khusus," *Jp (Jurnal Pendidikan) : Teori dan Praktik* 5, No. 2 (2020): 30–35, <https://doi.org/10.26740/jp.v5n2.p30-35>.

<sup>41</sup> Dian Febri Kuswardani, "Faktor yang Mempengaruhi Keberhasilan Implementasi Kebijakan Pendidikan Inklusi Kota Surakarta," 2020, <https://digilib.uns.ac.id/dokumen/75593/Faktor-yang-Mempengaruhi-Keberhasilan-Implementasi-Kebijakan-Pendidikan-Inklusi-Kota-Surakarta>.

<sup>42</sup> Hamidaturroh mah Hamidaturroh mah and Tri Mulyani, "Strategi Pembelajaran Jarak Jauh Siswa Berkebutuhan Khusus Di Sd Inklusi Era Pandemi Covid-19," *ELEMENTARY: Islamic Teacher Journal* 8, no. 2 (2020): 247, <https://doi.org/10.21043/elementary.v8i2.7907>.

			and educational objects that have different levels of learning. <sup>43</sup>
BIODIK	Sumarmin R. Tomi A. S., Razak A., Anhar A.	2021	The positive impact of blended learning is also demonstrated by learning in the field of applied science requiring more hands-on learning experience. Blended learning becomes an alternative to produce good learning skills by paying attention to good network access. <sup>44</sup>
Jurnal Basicedu	Indra Kartika Sari	2021	Integration of learning using hybrid learning requires educators to be flexible in all circumstances. The main goal is to make learning outcomes achieved. <sup>45</sup>
Jurnal Al Khawarizmi	Ibrahim Malik Jumaini, Hertin, H H. Nisfiati M	2021	Blended learning deserves to be an alternative to accommodate learning needs with a student-center approach with digital empowerment. <sup>46</sup>

Referring to the three focused questions of this study, the section will be explained in more detail the different views in addressing learning success for students with disabilities that are following by various analyses from the table above.

### Hybrid Learning Process for Learning Success of Students with Disabilities

There are several processes arranged in a flow that show the integration of all the elements involved. Students with disabilities will always be surrounded by the surrounding environment providing an outstanding role in creating safety for students with disabilities for receiving learning.

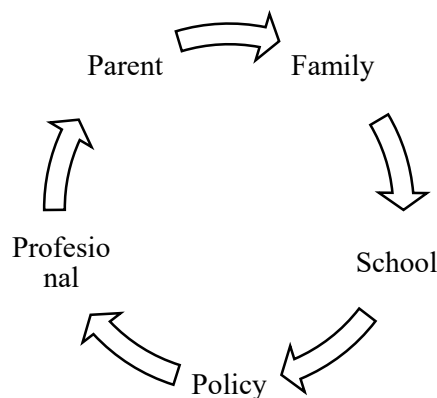


Figure 3. The Cycle of Learning Influence for Students with Disabilities

<sup>43</sup> Amelia Rizky Idhartono, “Studi Literatur : Analisis Pembelajaran Daring Anak Berkebutuhan Khusus Di Masa Pandemi,” *Jurnal Studi Guru Dan Pembelajaran* 3, no. 3 (December 31, 2020): 529–33, <https://doi.org/10.30605/jsgp.3.3.2020.541>.

<sup>44</sup> Sumarmin R. Tomi A. S., Razak A., Anhar A., “Efektivitas Model Blended Learning Terhadap Hasil Belajar Mahasiswa Pada Mata Kuliah Zoologi Di Era Covid-19,” *BIODIK* 7 (2021): 77–83.

<sup>45</sup> Indra Kartika Sari, “Blended Learning Sebagai Alternatif Model Pembelajaran Inovatif Di Masa Post-Pandemi Di Sekolah Dasar,” *Jurnal Basicedu* 5, no. 4 (July 13, 2021): 2156–63, <https://doi.org/10.31004/basicedu.v5i4.1137>.

<sup>46</sup> Ibrahim Malik Jumaini, Hertin, H H. Nisfiati M, “Penerapan Metode Pembelajaran Blended Learning Dalam Meningkatkan Pemahaman Konsep Hasil Belajar Siswa : Sebuah Meta Analisis” 5, no. 1 (2021): 48–63.

First, it departs from parents as the smallest unit of students with disabilities. In addition, qualified parents or families are more influential than social support. Positive parenting on the parents' side also greatly impacts the condition of students with disabilities. Parents can continue to develop abilities in this parenting by continuously participating of parenting skills training. Mental resilience on the parents also needs to be built, such as trust and optimism. The reason for the large role of parents in hybrid learning approach is because they will lead children to understand access technology. Therefore, it is important to understand some circumstances that can be minimized by parents, such as facilities, finances, and adequacy of knowledge.

Second, interaction with teachers and the development of learning systems built on ASIK (Alternative, Strategy, Innovative and Communicative) learning systems can be one of the alternatives.

Third, this process also demands the maturity of the curriculum that contributes to the government with its policies. This policy covers standards and objectives, relationships between organizations, and the disposition of implementers to be the controllers of other elements in achieving the success of students with disabilities. States should also devise strategies to improve educational technology.

Finally, interventions from professionals with a technological approach are more helpful and provide a sense of security for the smallest units in students with disabilities, in this case highlighting parents and families to provide input and advice helping the learning assistance process in the context of differences between students with disabilities. In this process, there are a couple of innovations in terms of blended learning models.

### **Establishment of Academic Resilience Through Learning with Hybrid Learning in Students with Disabilities**

Resilience in the academic context on a hybrid learning approach in students with disabilities is formed from the internal factors of the student itself that are covered in psychological roles, such as self-esteem issues, motivation, communication skills, self-control, good interpersonal relationships, and positive perception.

Hybrid learning itself is more effective than virtual learning, moreover compared to face to face delivery, the results look similar. The hybrid learning approach applied today has an impact on success, academic achievement, and student satisfaction. In addition, it also has a positive impact, flexible in every situation, and by following the student-center approach that is the target of learning in this era.

### **Factors That Can Be a Contributor to the Application of Hybrid Learning in Learning in Students with Disabilities**

There are several additional factors as reinforcement of the application of hybrid learning, namely accommodation of educational implementation, applicated innovation must be widely realized, the use of the internet and the positive attitude of teachers, and the competence of educators. The role of hybrid learning is much needed because of its role in strengthening multiple assessments for children.

### **Discussion**

The process which is key factors such as the description of the results in the study contributes to the educational students with disabilities and has also become factor of the system inherent in the life of children with disabilities. The system got to a tiny part form called subsystems. Bronfenbrenner's theory introduces three of the most important subsystems: microsystems including the roles of family, peers, schools, and the

environment. Then ecosystems are experienced in social contexts, and macrosystems offer conceptual descriptions of the cultural role.<sup>47</sup>

The effect of mixed learning models is an implication of different mixed learning models, while for mixed learning practitioners it depends on what goals they pursue and how successfully their application challenges are overcome, for example, "outcome ecology" model. One consideration in developing this model is cost-efficiency. For someone who focuses on cost savings, online self-study can be an interesting way of teaching. For someone who focuses on a constructivist and collaborative learning vision, online group discussions can be an important feature in course delivery.<sup>48</sup>

Innovation in hybrid learning has undergone many developments. Along with the emergence of four blended learning models, namely: 1) Gill Salmon's structured e-moderation, where moderators follow a series of steps to make students feel welcome in an online environment; 2) The learning ecology of Sun Microsystems documented by Wenger and Ferguson. This model is quadrant-shaped with axes for self-learning and axes for content/practice. Self-contained content studies can mean that books or online content is read out of sync. Self-practice can be a peer discussion or it can be called a peer discussion. Guided content studies can include in-class lectures or video conferencing. Guided practices may include mentoring or direct laboratory use. This mixed learning model has the advantage of clarifying that different learning goals can be achieved with different teaching modalities. Under expert guidance, learners can build their knowledge. The downside is not to reveal a clear implementation model; 3) Jones Mixed Learning Continuum, where the model deals only with delivery methods and theoretically; 4) Model Inquiry-Based Framework by Garrison and Vaughan, which envisions students and teachers as participants in the Inquiry Community. This blended learning model shifts the focus away from teaching to learning. The role of technology is to activate the three main elements of cognitive presence (information sharing, concept creation, and review), teaching presence (providing structure and direction), and social presence (enabling group collaboration).<sup>49</sup>

Esyin Chew reviewed models related to blended learning based on two leading educational theorists, Maslow and Vygotsky. Four models were chosen for holistic ideas or broad quotations related to mixed learning: (1) The E-Moderation Model emerging from the British Open University; (2) Ecological Learning Model with Sun Microsystems; (3) Continuum of Mixed Learning at the University of Glamorgan; and (4) Inquiry-Based Framework by Garrison and Vaughan.<sup>50</sup>

Mentoring for teachers in schools also adjusts to the professional attitude that must be owned by teachers including 1) Having talent, interests, soul calls, and idealism; 2) having a commitment to improving the quality of education, faith, piety, and noble morals; 3) Having academic qualifications and educational background in line with the field of duty; 4) Having the necessary competencies which are suitable with the field of duty; 5) Having responsibility for the implementation of professional duties; 6) Obtaining a determined income following by work performance; 7) Having the opportunity to develop professionalism in a sustainably manner by lifelong learning; 8) Having guaranteed legal protection in carrying out professional duties, and 9) Having a

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<sup>47</sup> "Implementasi Teori Ekologi Bronfenbrenner Dalam Membangun Pendidikan Karakter Yang Berkualitas | Lentera," accessed October 28, 2021, [https://journal.iain-samarinda.ac.id/index.php/lentera\\_journal/article/view/439](https://journal.iain-samarinda.ac.id/index.php/lentera_journal/article/view/439).

<sup>48</sup> Admin, "Model-Model Blended Learning Dan Implikasinya," accessed October 28, 2021, <https://www.suryadisabilitas.com/2021/08/model-model-blended-learning-dan-implikasinya.html>.

<sup>49</sup> Esyin Chew, Norah Jones, and David Turner, "Critical Review of the Blended Learning Models Based on Maslow's and Vygotsky's Educational Theory," in *Hybrid Learning and Education*, ed. Joseph Fong, Reggie Kwan, and Fu Lee Wang, Lecture Notes in Computer Science (Berlin, Heidelberg: Springer, 2008), 40–53, [https://doi.org/10.1007/978-3-540-85170-7\\_4](https://doi.org/10.1007/978-3-540-85170-7_4).

<sup>50</sup> Chew, Jones, and Turner.

professional organization that has the authority to regulate matters related to the professional duties of teachers (Law No. 14 of 2005 concerning Teachers and Lecturers). Professional competence is the ability of teachers in mastering knowledge in the fields of science, technology, and/or art and culture.<sup>51</sup>

Many educators and parents are equally interested in positive parenting because it is often described as beneficial to the development of children, including children with special needs. Studies have shown, for example, that the language and social skills of children with down syndrome can be improved if they are sensitive and responsive to their needs. This is an example of how parental support and connections can help a child with special needs develop. Parental support and connection are key features of positive parenting.<sup>52</sup>

Academic resilience must be owned by students in doing all activities, letting it be learning, doing academic tasks, or other activities. Academic resilience can be seen from some dimensions: 1) adjusting to indicators of adapting to academic pressures, changing according to circumstances, controlling feelings of frustration with academic problems; 2) toughness with indicators of self-strengthening and surviving academic problems; 3) intelligence faces difficulties with forward-thinking indicators and identifies difficulties; 4) troubleshooting with indicators able to find a way out and overcome problems.<sup>53</sup> The results of the study conducted by Adhiman and Mugiarto showed that there is a significant positive correlation between adjustment and academic resilience in the world. Students when facing learning during the covid-19 pandemic at Institut Indonesia High School in Semarang.<sup>54</sup>

## Conclusion

The educational problems that afflict students with disabilities become one of the challenges during the pandemic. The presence of hybrid learning can be an alternative solution to address the need for inclusivity in education today. Although different circumstances in institutions or backgrounds of individuals experiencing special needs are also relative factors to consider in assessing the effectiveness of results. However, the possibility of the application in hybrid learning to students with disabilities not only creates an innovation boost in related fields but prepares students with disabilities by the transformed resilience, making them always be ready to face learning conditions in any form.

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<sup>52</sup> Pink Families, "Positive Parenting: Positive Parenting for Children with Disabilities," Pink Families | Healthy, Proud, Informed | Gay families | LGBT families, July 14, 2013, <https://www.pinkfamilies.com/positive-parenting-for-children-with-disabilities/>.

<sup>53</sup> Hardiansyah Hardiansyah et al., "Penyusunan Alat Ukur Resiliensi Akademik," *Psikostudia: Jurnal Psikologi* 9, no. 3 (November 5, 2020): 185–94, <https://doi.org/10.30872/psikostudia.v9i3.3159>.

<sup>54</sup> Adhiman and Mugiarto, "Hubungan Penyesuaian Diri Terhadap Resiliensi Akademik Pada Siswa Dalam Menghadapi Pembelajaran Saat Masa Pandemi Covid 19."

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