

Analysis of National Standards of Education in the Disruptive Era (Study of Descriptive Analysis at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta)

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Abstract

Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and state. National Education Standards in PP 57 of 2021 concerning National Education Standards are the minimum criteria regarding the Education system in all jurisdictions of the Unitary State of the Republic of Indonesia. National education standards are the minimum criteria that must be met in the implementation of education. National Education Standards include Content Standards, Process Standards, Graduate Competency Standards, Educators and Education Personnel Standards, Infrastructure Standards, Management Standards, Financing Standards, Assessment Standards. In order to maintain the quality of education, the consistency of the functions and objectives of education, the curriculum, learning process, and managerial as a whole must refer to and be guided by the National Education Standards. The objectives of this research are (1) to analyze the 8 National Standards of the Disruptive Era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta (2) to provide input based on findings regarding the application of the 8 National Education Standards to improve the quality of education and prepare highly competitive graduates. This study uses a qualitative descriptive research design. This type of research is a descriptive analysis study. The data used is primary data. Data collection techniques used are interviews and documentation.

Keywords

disruptive era; information; students; national education standards



I. Introduction

As one of the areas of Indonesia's national development, the education sector is also regulated in laws that are systematically structured. In general, the implementation of the educational process in Indonesia is stated in Chapter XIII article 31 paragraph 1: "Every citizen has the right to receive instruction. The government seeks and organizes a national teaching system regulated by law."

The problem that arises from the law above is how managerially the teaching process and system can be implemented throughout the archipelago evenly and uniformly. With a variety of backgrounds and cultures that exist in Indonesia, in order to achieve an ongoing process or what is called education, it must have a purpose, it is deemed necessary to have a basic reference that can be a role model for each region. In fact, it can even be seen as the basis for uniform teaching in Indonesia (Arifi, Ahmad: 2011).

Therefore, then came a law that discussed more deeply about the goals of education with the uniformity which was then called the standardization of national education. The formulation of the educational objectives is formally legal with the existence of Law Number 20 of 2003 concerning the Sistem Pendidikan Nasional (SISDIKNAS) where its implementation is translated into a number of regulations, including Government Regulation Number 19 of 2005 which is now replaced by Government Regulation Number 32 of 2013 concerning Standar Nasional Pendidikan. (SNP).

According to Astuti et al (2019) Education is an obligation of every human being that must be pursued to hold responsibilities and try to produce progress in knowledge and experience for the lives of every individual. Education is one of the efforts to improve the ability of human intelligence, thus he is able to improve the quality of his life (Saleh and Mujahiddin, 2020). Education is expected to be able to answer all the challenges of the times and be able to foster national generations, so that people become reliable and of high quality, with strong characteristics, clear identities and able to deal with current and future problems (Azhar, 2018).

The problem of Indonesian education is getting more complicated in the face of the Disruptive Era. Since the first, Indonesia's education problems have not achieved optimal success as expected. Some concepts that are everlasting problems (problems that are never finished) have not been completely resolved. Dismantling the curriculum, formulating educational standards, improving teacher competence and many problems of education policy that are far from hot. This problem continues to be discussed, discussed, debated and even implemented in many ways. Sometimes, its implementation depends on who holds the educational power.

The problem of education that is so complicated in seeing the progress of Indonesian education is not yet resolved, now we are faced with education in the disruptive era. This era not only continues the greatness of the previous era that our education has not had time to catch up with, but also an era that has a different ecosystem from the previous system. There is a lot of disruptive (chaos) in many factors. Our education is increasingly having a very heavy burden.

In the past, the class had to have a building, in this era the class doesn't have to exist in real terms but can be done with a digital system. In the past, the learning model was mostly led to mastering science and technology, today we have to use science and technology to become a more useful product. In the past, the literacy produced in our educational institutions was calistung (reading, writing and arithmetic), today we must master three basic literacys, namely data literacy, technological literacy and human literacy. Calistung is no longer discussed as a staple, but it becomes the foundation in the life of this era. So this era is an era where fundamental changes occur, and our world of education is still trying to live it.

Indonesian Education Group Our world of education is still looking for the most suitable model for the adoption, adaptation and replication of the disruptive era. In interpreting it, there are three groups that are the easiest to classify. (1) Conservative groups who think that the digital age must be protected in many ways. Preventing children from using gadgets, not allowing internet connections, keeping away the world of internet noise are some of the steps taken by this group. The basic principle is that the disruptive era instrument has more harm than benefit. The solution is to avoid it. (2) Integrative or convergent groups who think that combining traditional education and digital education is a good solution. The principle of "Al muhafadhotu ala qodimi sholih, wal ahdu bil Jadidi Aslah" Keeping the good traditions of the past and adopting better things in the present is the most possible thing. Most of these groups take "traditional" principles in the context of

morality, values and humanity. While the "digital" principle is more about new knowledge and skills. These knowledge and skills are adaptations of the disruption that is present and cannot be denied in real life. Education must deal with it, not avoid it. (3) The fully digital or fully digital group who think that digital is the current educational solution. Educational domains classified by Bloom into three; Cognitive, affective and psychomotor can be completed in a digital ecosystem. In this context, affective is the most debated thing by education experts. They believe that the digitalization of education will not complete the education domain as a whole. If education only contains the transfer of knowledge and knowledge skills, then digital can be the core of education, but education is not only about those two things. There are affective aspects that cannot be solved by digital. However, this is denied by this group, where "Artificial Intelligence" (artificial intelligence, digital products will have feelings or emotions like humans) is a solution that is being developed.

Characteristics of disruptive education before implementing the strategy of how Indonesian education combines with, it is important that we understand the characteristics of this era. There are several dimensions that must be considered in understanding the disruptive era. (1) Demographic dimensions. In the past, education was limited by space and time, where demographics were an important part of its consideration. The destructive era no longer sees space and time as a limitation. Schools can use placeless (no place), timeless (no time). That is, the real place is replaced with an unlimited virtual place, as well as unlimited learning time. Students can learn anytime, anywhere and with anyone. (2) Dimensions of the profession. In the previous era, the profession was well organized and had a high level of establishment (the result of past community consensus). In this era, work is disruptive where types of work that were once established are now considered irrelevant. This new job relates to the changes and developments of the digital world. These jobs must be prepared by educational institutions, so that inevitably educational institutions must have a special strategy in making a link and match between the concept of education and work practice. (3) Literacy dimension. Literacy is literacy. Literacy can be defined according to the type of thinking skills. LOTS (Lower Order Thinking Skills) defines literacy by memorizing, understanding and applying. HOTS (Higher Order Thinking Skills) can define literacy by evaluating, analyzing and creating. Calistung which used to be the main literacy is no longer relevant in this era.

The first literacy is data literacy. Students are not only presented with data (knowledge, information, material) with the nature of single reality (single truth) but must be multiple reality (plural truths). The subject matter is abundant and easily accessible through the digital world and it must be an indisputable fact. The data used as subject matter must be able to be analyzed into useful and good knowledge for the lives of students. The second literacy is technological literacy. Students in RI aim to understand data sources through technological tools. Understanding how it works and maintenance is an absolute thing that must be known. The third literacy is human literacy. Data and technology tools are passive and can work according to the will of the user. Humans as a single user must understand the nature of his life and continue his future life. Students must be able to understand it all so that two literacy (data and technology) will work in accordance with human nature itself. Educational institutions should not be an instrument to provide a broad technological space to control humans. But it must be the other way around, it is humans who control technology.

Three Education Strategies in the disruptive era are new "stars" in the world of education, so it is necessary to study and analyze the most relevant strategies in this era. When referring to the characteristic dimensions of the disruptive era described above, there are at least three strategies that must be carried out by Indonesian education.

The first education strategy is to change the Indonesian education system. At least from two educational groups (integrative and fully digital), there will be two fundamental changes in reconstructing education. The first change is the “blended learning” approach (mixed learning system, or also known as hybrid). The second approach is to use an ODL (online distance learning) system.

The Blended Learning system is a system that combines a traditional education system that is factually demographic with a virtual digital system. These two systems are combined by changing the educational ecosystem. The distribution can be discussed with various considerations, whether 50% for each system, 70:30, 60:40, or 80:20. It all depends on the type of schooling and the ability of educational institutions to adopt and adapt digital systems.

The second strategy is to prepare for disruptive era professions in schools/madrasas. We know that the link and match between Indonesian education and industry has always been weak. When the disruptive work in this era changes, there is a new opportunity for the world of education to immediately adapt the work of this era. However, special considerations need to be made to understand the work of this era. There are at least three principles that must be considered.

The third strategy is to reconstruct the curriculum with the three main literacy approaches in RI 4.0. Calistung which became the hallmark of the previous era must be reconstructed as soon as possible so that education does not fall behind. There are several sub-strategies in the implementation of this curriculum reconstruction. (1) understand teachers about the paradigm of the RI 4.0 era. We should understand that most of our teachers are Old Age teachers. The paradigm is still using the 3.0 industrial revolution which still uses simple technology in the digital world. Even most of our teachers are still not computer literate. At best, our teachers are millennial teachers (those born in the 2000s, or generation Y). They can be the leading sector in moving our education, but the numbers are still small. Also, many of them have not been equipped with digitalization skills at their campuses to study teacher training. (2) start migrating educational content from traditional to digital origins. This traditional can be defined as a printed book, partial material is not holistic, it is difficult to synchronize one material with another and so on. Content in the digital world will be easier, systematic and of course holistic when using a digital ecosystem. The use of subject matter content applications must be started by educational application developers, so that teachers will have a choice of applications in their learning models. In the future, learning media will be assisted more by the application of digital technology than traditional media which are still used today. (3) build a pilot digital school system built by the government. The Blended Learning system which is an alternative solution in the world of education must immediately be built so that schools that have not implemented it will have concrete and legal examples. The government must spend more funds to conduct research and development to make adaptation projects from traditional to digital. Based on the above problems, education in Indonesia requires national standards that require adjustments to the dynamics and developments of science, technology, and people's lives for the sake of improving the quality of education as the first consideration for the issuance of PP 57 of 2021 concerning National Education Standards.

In addition, PP 57 of 2021 concerning National Education Standards also has the background that Government Regulation Number 19 of 2005 concerning National Education Standards has been amended several times, most recently with Government Regulation Number 13 of 2015 concerning the Second Amendment to Government Regulation Number 19 of 2005 concerning National Education Standards have not been

able to meet the needs of the current education system, so they need to be replaced with National Education Standards that are in accordance with current developments.

National Education Standards are used as a reference for curriculum development and education administration to realize national education goals. National Education Standards are refined in a planned, directed, and sustainable way to improve the quality of education in accordance with the changing demands of local, national, and global life. National Education Standards in PP 57 of 2021 concerning National Education Standards include graduate competency standards; content standards; process standards; Education assessment standards; education personnel standards; standard of facilities and infrastructure; management standards; and financing standards.

II. Research Method

The type of research used by the author is normative legal research or commonly referred to as research for academic purposes. The method used is descriptive analytical method, meaning that it describes as well as provides analysis of the themes discussed.

III. Results and Discussion

3.1 Analysis Standards Graduation in the Disruptive Era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta

The results of the overall analysis on the competency standards of graduates in the disruptive era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta The competency standards of graduates in the Education Units of General secondary education have focused on knowledge to improve the competence of students so that they can live independently and participate in further education. The achievement of graduate competency standards is determined based on comprehensive data on students that are obtained continuously during the learning period. Management of graduation standards is good, this can be seen from the organization of schools that have a curriculum development team that prepares and implements SKL management, namely setting graduation criteria for students at the education unit level, regulating the minimum competencies that students must achieve after participating in the learning process at the unit level. certain education which includes knowledge, attitudes and skills in implementing student-related activities as stated in (Permen Diknas number 23 of 2006:13) concerning graduate competition standards which regulates the graduation criteria of students from educational units. Competency standards of graduates at SMA Negeri 53 DKI Jakarta and SMA Negeri 59 DKI Jakarta are used as a reference in the development of 1) content standards; 2) process standards; 3) Educational assessment standards; 4) education personnel standards; 5) standard of facilities and infrastructure; 6) management standards; and 7) financing standards.

3.2 Analysis of Standardized Content in the Disruptive Era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta

Overall, the results of the analysis of content standards at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta are good. The achievement of content standards in schools is good. Schools have KTSP documents that are compiled and developed through the mechanism of curriculum preparation, implemented in the form of teaching based on 7 principles, namely involving relevant institutions, containing basic competencies and competencies in indicators in each subject and having curriculum target achievement. (PP No. 57 of 2021) on content standards, and (Permendiknas number 6 of 2007: 9) on

government policy that schools are required to develop a KTSP curriculum. Content standards are minimum criteria that cover the scope of material to achieve graduate competence in certain paths, levels, and types of education. The scope of the material as referred to in paragraph (1) is a study material in the learning content. The scope of learning materials is formulated based on mandatory content in accordance with the provisions of laws and regulations, scientific concepts and pathways, levels, and types of education. Slamet PH in Sri Hartati (2000:4), suggests that school-based management is the coordination in the alignment of resources which is carried out autonomously by the school through a number of management inputs to achieve school goals by involving all stakeholders in aspirational decision making.

3.3 Standard Analysis of the Disruptive Era Process at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta

Overall SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta have made innovations by empowering local governments to implement process standards based on local wisdom. As we understand, the process standard is one of the eight standards that must be followed nationally as a form of central government policy in regulating national education standards. In implementing process standards, it must refer to basic competencies (KD) in order to achieve graduate competency standards (SKL) that have been determined at each level and educational unit. The translation of the implementation of standard processes in the classroom, a teacher must make a lesson plan to achieve each indicator of achievement of each subject. What is in the lesson plans, then the teacher looks for reference books that are used for PBM in class. In the teaching and learning process in the classroom (most schools and educators), many still use one book (package book/baboon book) which is used as a reference for teaching in the classroom. Usually, textbooks are compiled by the government and duplicated by the community. In this case, the K-13 textbook used in all schools.

With the diversity of abilities and backgrounds of different students, teachers are given the opportunity to manage the classroom with a contextual approach according to the conditions of their area and environment. With the diversity of abilities and different backgrounds of students, it is time for teachers to be given the opportunity to manage the classroom with a contextual approach according to the conditions of their area and environment. The one size policy fit for all approach (one policy applies to all) has to be abandoned for implementation matters. This is also one way to practice Freedom to Learn and Motivating Teachers. Local governments are given the freedom to empower their teachers to achieve quality education development. Each region/region needs to make contextual-based textbooks/baboons by absorbing local wisdom in each region. The book, which has been compiled and ratified by the National Education Standards Agency (BSNP) and Balitbang, is trained for teachers on how to use contextual-based learning. Training is very important to ensure that teachers can practice contextual learning properly and correctly.

The teaching and learning process at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta is very dynamic and student center learning activities can be carried out properly and correctly. The education office together with schools supervises to ensure the learning process runs as expected. Teachers provide facilitation by using contextual-based textbooks and can also use the environment as a learning resource. Students will be easier to digest because the teaching media used by teachers use the environment around the area and school.

3.4 Analysis Assessment Standards in the Disruptive Era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta

The results of the overall analysis on educational assessment standards in the disruptive era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta are very good. Judging from the management of the implementation of the assessment standards by the curriculum development team who prepares, implements and realizes the management of the assessment standards, namely informing the design and assessment criteria in the subject syllabus. (Permendiknas number 20 of 2007:29) regarding assessment standards for schools. The assessment based on the sub-indicators are as follows: 1) Aspects of the assessment are in accordance with the domains of attitudes, knowledge and skills; 2) The technique of objective, accountable and complete assessment; 4) Follow-up education assessment gets a score of 61.7. Schools have followed up on the results of the assessment reports, and conducted periodic assessment reports; 5) Assessment of attitude aspects is taken by educators based on observations; 6) Assessment of knowledge aspects is taken by educators based on oral or written tests; 7) Assessment of skills aspects is taken by educators based on practice, projects, or portfolios, 8) Assessment by educators in the form of daily assessments, mid-semester and end-semester assessments, 10) Assessments by schools consist of school exams, 11) Assessments by the government, namely AKM and 12) In determining the grade promotion and graduation of students based on appropriate considerations by the Teacher Council Meeting.

3.5 Analysis of Educational Personnel Standards in the Disruptive Era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta

The results of the overall analysis on the standards of educators and education in the disruptive era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta are good, this can be seen from the management carried out by the principal and the curriculum development team who prepare and implement and realize CAR management, namely about fulfillment of academic qualifications and competencies as learning agents as principals, teachers, administrative staff, librarians and counselors. The assessment based on the sub-indicators are as follows:

- a. Availability and competence of teachers in accordance with the provisions. All teachers are teachers with a minimum education of S1, S2 and there are 3 teachers with educational qualifications of S3 for SMA 53 Jakarta and 2 teachers for S3 education at SMA Negeri 59 Jakarta, Teachers teach 36 to 40 students per class, The majority of all teachers have educator certificates, and some teachers have good UKG scores and some teachers have very good UKG scores.
- b. Availability and competence of the principal according to the provisions. The principal at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta has a master's degree qualification, Age of the principal is under 55 years old, Has 30 years of learning experience, Has an IV/C rating, Has certification of educators and principals, Has a very good personality, Has competence excellent managerial and Entrepreneurship
- c. Availability and competence of administrative staff in accordance with the provisions. There is a head of School Administration Personnel with S2 education qualifications available
- d. SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta have a qualified S1 head laboratory, have a laboratory head certificate, and laboratory technicians are available.
- e. Having a librarian with an undergraduate education and a librarian certificate but not library science. Have 2 librarian and have good professional development competence

3.6 Analysis of Standards Facilities and Infrastructure in the Disruptive Era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta

The standard of facilities and infrastructure at SMA Negeri 53 and SMA Negeri 59 Jakarta are in accordance with the principles; support the implementation of active, creative, collaborative, fun, and effective learning; ensure security, health and safety; friendly to persons with disabilities; and friendly to environmental sustainability. the process of optimizing information and communication technology in the learning process. To achieve students who have competitiveness and competence in accordance with the profile of Pancasila learners in the Disruptive Era, SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta implemented various programs and strategies to complement facilities and infrastructure based on information and communication technology (ICT). Such as equipping all classrooms with LCDs, increasing internet access bandwidth, and other equipment based on information and communication technology (ICT). Provide laptops for teachers who do not have a personal laptop. 2) The school is actively campaigning and or motivating teachers personally to take advantage of information and communication technology. This is because with the rapid development of information and communication technology at this time, teachers are not only the only source of learning, students can search for learning materials independently by utilizing the internet network. .3) Provide workshops and trainings to utilize information and communication technology (ICT) in the implementation of learning, both training conducted independently and training organized by other parties

3.7 Analysis Management Standards in the Disruptive Era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta

Education management standards in the disruptive era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta have used school-based management which is shown by independence, partnership, participation, openness, and accountability can be seen from the management of the principal who has a school development development team that helps prepare , implement and realize management standard management, namely Management of management standards regarding management standard activities by primary and secondary education units including: formulating Vision, School Mission, preparation of School Work Plans, empowering educators and education staff, managing infrastructure, managing financing, creating a climate that is conducive to conducive environment, supervision programs, preparing school accreditation assessments, (Permendiknas number 19 of 2007:25) regarding management standards for schools/madrasas. (Permendiknas number 6 of 2007:11) regarding the government's policy that schools are required to develop the KTSP curriculum. In practice, the school empowers all stake holders according to their duties and responsibilities. The assessment based on the sub-indicators are as follows:

- a. Schools carry out management planning.
 1. The school's vision, mission and goals are formulated based on input from school residents.
 2. The work meeting is held when the odd semester is about to start.
 3. In the working meeting, long-term and medium-term programs are discussed.
 4. In the working meeting, the school committee is invited to provide input.

- b. The management program is carried out in accordance with the provisions
 1. Have complete school management guidelines
 2. Acceptance of new PPDB students from the Education Office, Orientation of new students following the education calendar schedule, class counseling services and individual counseling by BK teachers
 3. Schools have training programs, such as the LMS 8 training program
 4. Evaluation of the work program in the Working Meeting. Establish a quality assurance team for school evaluation and follow-up
 5. Partnerships with other schools, namely the Misbahul Amal Foundation on: organizing Eid al-Ahdha and Eid al-Fitr prayers, the practice of managing corpses, training Qori and Qori'ah, and making MOUs with related foundations.
 6. Meetings with students or OSIS and MPK administrators regarding the management of the curriculum and learning activities
- c. Schools manage management information systems with a score of 5.2. The management information system used at SMA Negeri 53 DKI Jakarta is Pijar Sekolah and Sains SiPintar. There are things that must be completed, namely schools provide school information services including through websites, emails, telephone numbers, whatapps numbers which are managed regularly which are managed by education personnel as administrators of school information services. Schools must have records or documentation related to service data and school information collected in a special folder on Gdrive.

3.8 Analysis Financing Standards in the Disruptive Era at SMA Negeri 53 Jakarta and SMA Negeri 59 Jakarta

The results of the overall analysis on education financing standards in the disruptive era at SMA Negeri 53 DKI Jakarta. The implementation of the assessment of the financing standard document is very good, this can be proven by the achievement of the assessment of the financing standard document. Assessment of the SNP Dit.PSMP Ditjen Mendiknasmen (2010) and the quality reference used to achieve the fulfillment of the quality of education is the national education standard (PP number 32 of 2013 article 1 paragraph 31) concerning quality assurance of education units to achieve national education standards and the Minister of National Education number 69 of 2009 concerning financing standards. The assessment based on the sub-indicators are as follows:

- a. Schools provide cross-subsidized services.
 1. The school eliminates tuition fees, other operational costs for all students such as exam fees, practicum fees, farewell fees, no study tours.
 2. There are students who cannot afford the Jakarta Smart Card
- b. School operational expenses in accordance with the provisions of.
 1. Non-personnel operational costs for one year; there are standard non-personnel operating costs per school, per study group, and student as well as a minimum percentage of the cost of school stationery (ATS) and consumables and materials
 2. Manage the allocation of funds properly
 3. Report on the management of funds accessible to stakeholders
 4. The school eliminates tuition fees, other operational costs for all students such as exam fees, practicum fees, farewell fees, no study tours.

IV. Conclusion

Learning in the era of the industrial revolution 4.0 towards society 5.0 in the perspective of education management is carried out by integrating various aspects that affect the achievement of national education goals. Furthermore, it is framed through reform policies in eight fields of national education standards, which include contents that are in accordance with the characteristics and needs of education in the era of the industrial revolution 4.0. If this condition goes well, it is hoped that our national education system will be able to create a 5.0 society order, namely an information technology-based society that is super intelligent, prosperous, and civilized. Various challenges, demands for the competencies mentioned above, so all parties must prepare themselves and improve in making improvements and changes with the aim of improving the quality of education, where education is a system, change must also be started systemically. Indonesia needs to prepare Superior Human Resources in the era of the Industrial revolution 4.0 towards Society 5.0 through Educational Interventions. Indonesia in 2025, will produce abundant human resources (HR) of productive age. However, not all people of productive age have good competence. Human resources who have competence can become development capital, but those who are not competent will become a development burden for Indonesia. Therefore, to prepare Superior Human Resources in the era of the Industrial revolution 4.0 towards Society 5.0, it is necessary to carry out educational interventions, including curriculum, educators and education staff, infrastructure, funding, and education management. Education development strategy to improve Human Resources in the era of the industrial revolution 4.0, to answer future challenges and competencies. So a strategic approach is needed in every path, level, and type of education, with the aim of developing human resources who are faithful, devoted, knowledgeable, have integral, independent, creative, nationalist personalities.

References

- Astuti, R.W., Waluyo, H.J., and Rohmadi, M. (2019). Character Education Values in Animation Movie of Nussa and Rarra. Budapest International Research and Critics Institute-Journal (BIRCI-Journal). P. 215-219.
- Azhar, A. (2018). Students' Trends in Islamic Communication Postgraduate in2010-2016 State Islamic University of North Sumatera (UINSU). Budapest International Research and Critics Institute (BIRCI-Journal), P.206-214.
- Bloom, B, (1956). *Taxonomy of Educational Objectives*, New York:
- David I. Cleland dan William R. King, (1972). *Management : A Systems Approach* New York : Mc-Craw-Hill.
- Direktorat Jendral Guru dan Tenaga Kependidikan. Guru Pengerak Indonesia Maju, wujudkan Sumber Daya Manusia yang Unggul. <https://p4tkbmti.kemendikbud.go.id>
- Edward Lumsdaine dan monika Lumsdaine, (1995). *Creative Problem Solving* (New York : McGraw-Hill, Inc.
- Gardiner, Mayling Oey dkk. (2021). *Era Disruptif Peluang dan Tantangan Pendidikan di Indonesia*. Jakarta: APII
- Mohanty, L. (2000). *Handbook of Total Quality Management* Mumbai:Ashwin J.Shalh Jaico Publishing House .
- Popper, K. (1999). *Life is Problem Solving* .New York:Routledge.
- Ralp, G. Lewis dan Douglas H.Smith. (1994). *Total Quality in Higher Education* Delray Beach:St Lucie Press.

- Richard A. (1973), Johnson, Fremon E. Kast dan James E Rozenzweig, *The Theory and Management of Systems*. New York : McGraw-Hill.
- Richard, W.(2002). Paul dan Linda Elder, *Critical Thinking* .New York : Prentice Hall.
- Ricky W. Griffin, *Management* (Boston: Houston Mifflin Co. 1987) p. 492
- Robert M. Gagne dan Leslie J. Briggs, *Principles of Instructional Design* (New York : Holt, Rinehart and Winston, 1979) p.85
- Romiszowski, (1981). *Designing Instructional Systems*. New York : Nicholas Publishing.
- Saifudin, A. (1998). *Sikap Manusia : Teori dan pengukurannya*. Yogyakarta: Pustaka Pelajar.
- Saleh, A., Mujahiddin. (2020). Challenges and Opportunities for Community Empowerment Practices in Indonesia during the Covid-19 Pandemic through Strengthening the Role of Higher Education. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*. Volume 3, No 2, Page: 1105-1113
- Sallis, E, (2008). *Total Quality Education*, IRCISOD, Banguntapan, Yogyakarta.
- Salusu. (1996). *Pengambilan Keputusan Strategik*. Jakarta:Gramedia:GRasindo.
- Shoji Shiba. (1993). *New American Total Quality Management*. Portland:Productivity Press.
- Shoji Shiba.Alan Graham, dan David Walden,A(1993). *New American Total Quality Management*. Portland:Productivity Press.
- Stephen, G. (1994). dan Arnold Wimerskirch. (1994). *Total Quality Management* NY.John Wiley & Sons.
- Stephen, R. (1997). *Managing To day*. New Jersey : Prentice-Hall.
- Steven, D.(2002), Schafersman, *An Introduction to Critical Thinking*, Paul.
- Steven, D.(2002). Schafersman, *An Introduction to science, Scientific Thinking and Scientific Method*.
- Surakhmad, W. (1990). *Pengantar Penelitian Ilmiah*. Bandung : Penerbit Tarsito.
- Syaodih, C. (2009). *Sistem Penjaminan Mutu Program Pembelajaran di Perguruan Tinggi Manajemen Informatika dan Komputer*. Disertasi UNINUS Bandung.
- Tampubolon, D. (2001). *Perguruan Tinggi Bermutu..* Jakarta: PT Gramedia Pustaka Utama.
- Thomas, S (1990). dan Bateman dan Carl P.Zeithaml. (1990). *Management Function and Strategy*. Boston:Irwin,Inc.
- Tuntas, B.(2003). *Efektivitas Penerapan Manajemen Mutu Terpadu*, Tesis UNJ
- Undang-undang Nomor 20 Tentang Sistem Pendidikan Nasional: 2003
- Wayne F. (1995). dan Cascio, *Managing Human Resources*. New York : McGraw-Hill,Inc.
- William, A. (2004). Shrode, *Organization and Management : Basic Systems Concepts*. Petailing Jaya, Irwin Book Company.