

## The Effectiveness of ANBK Implementation in Raising the Educational Quality of Elementary School

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### ABSTRACT

The purpose of this research is to provide an overview of how the computer-based national assessment (ANBK) was implemented at SD Negeri 20 Baringin. The study employs descriptive survey methods within a qualitative paradigm. Unstructured interviews, observations, and documentation studies are used as data-gathering strategies. The principal, vice curriculum officer, and program coordinator were the informant sources. employing snowball sampling to identify informants. Miles and Huberman models are employed in data analysis methods. Data reduction, data visualization, conclusion drawing, and data verification are all steps in the data analysis process. The improvement of the uniformity of the educational process in schools is the primary goal of the computer-based national assessment. Exercises in literacy, numeracy, and environmental surveying are used to increase learner effectiveness. ANBK is put into effect in three stages. The initial step of preparation entails participant registration, parent socialization, an implementation plan, socialization of accreditation and academic accomplishment, and an implementation timetable. The program's organization and supporting staff, which includes supervisors and technicians, is the second stage. Infrastructure and facility preparation using computers, rules for implementation, minutes, and attendance requirements. Third, the literacy and character survey's first day was followed by two days of the implementation stage. Day two of the environmental surveys and counting The assessment step is completed using the findings of the coloured reports that are included on the education unit's report card. The ANBK program is funded by the Regular School Operational Assistance Fund.

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## ABSTRAK

### Kata Kunci:

ANBK,  
Asesmen Nasional  
Berbasis Komputer,  
Efektivitas Program,  
Mutu Pendidikan.

Penelitian ini bertujuan untuk mendeskripsikan penyelenggaraan Asesmen Nasional Berbasis Komputer (ANBK) di SD Negeri 20 Baringin. Penelitian menggunakan paradigma kualitatif teknik survey deskriptif. Teknik pengumpulan data menggunakan wawancara tidak terstruktur, observasi, dan studi dokumentasi. Sumber informan berasal dari Kepala Sekolah, Wakil Kurikulum dan koordinator program. Penentuan informan menggunakan *snowball sampling*. Teknik analisis data menggunakan model Miles dan Huberman. Tahapan analisis data melalui reduksi data, display data, dan pengambilan kesimpulan serta verifikasi data. Tujuan utama Asesmen Nasional berbasis komputer adalah untuk meningkatkan standarisasi proses pembelajaran di sekolah. Efektivitas pembelajarn dicapai melalui latihan literasi dan numerasi serta kegiatan survei lingkungan. ANBK dilaksanakan melalui tiga tahap. Pertama, tahap persiapan meliputi pendaftaran peserta, sosialisasi wali murid, jadwal pelaksanaan, sosialisasi akreditasi dan prestasi sekolah, jadwal pelaksanaan. Tahap kedua, organisasi program dengan personel pendamping terdiri dari pengawas dan teknisi. Persiapan sarana dan prasarana melalui computer, aturan pelaksanaan, notulensi, dan persyaratan kehadiran. Ketiga, tahap implementasi dilaksanakan selama dua hari, hari pertama survei literasi dan karakter. Hari kedua survei lingkungan dan penomoran. Tahap evaluasi dilaksanakan melalui hasil laporan berwarna yang tertera pada rapor satuan pendidikan. Sumber pendanaan program ANBK berasal dari Dana Bantuan Operasional Sekolah Reguler.

## INTRODUCTION

One of the goals of educational development is to make education accessible to everyone. To ensure human resource development, education must be made more accessible and of higher quality. The academic performance of Indonesian students has remained poor in recent years. Meanwhile, the advancement of Information and Communication Technology (ICT) is integrally linked to the human survival ([Prasetyo & Ilham, 2022](#)). ICT has emerged as one of the solutions for improving educational quality and looking into how ICT access affects academic performance in Indonesian junior high school (SMP) students ([Frazier, 2020](#); [Meriyanti & Jasmina, 2022](#)).

The Computer-based National Exam (CBNA), which will be implemented by the end of 2021, will present a new challenge to the education community. CBNA its effect

on emotional intelligence learners ([Baharun et al., 2019](#)). The preparatory stage that educational institutions, particularly elementary schools, must complete necessitates the rapid adaptation of all supplementary elements within the basic school framework. The academic issue centres on the challenges in developing questions forms and aligning with existing curriculum, while the technological issue deals with reliability and availability of the technologies involved in the CBNA ([Biantoro & Arfianti, 2019](#)).

CBNA is a Computer-Based National Assessment designed to evaluate the quality of each school, madrasah, and equity program in the elementary and secondary pillars. The National Assessment is comprised of three principal instruments: the Minimum Competency Assessment (MCA), the Character Survey (CS), and the Learning Environment Survey ([Manguni, 2022](#)). Students are prepared to take the CBNA according to health guidelines, beginning with planning infrastructure facilities, funding, and education personnel who serve as technicians, proctors, and supervisors.

All elementary school environment supporting elements must quickly adapt to complete the preparatory steps that educational institutions, particularly elementary schools, must carry out. The Computer-Based National Assessment (CBNA), formerly known as the National Examination, now includes the Minimum Competency Assessment, Character Survey (CS), and Learning Environment Survey and is the current name of the national education evaluation system. ([Azra, 2018](#)).

In a letter dated January 1, 2021 from the Minister of Education and Culture, the government decided to discontinue the National Examination and replace it with the National Assessment. The evaluation aims to assess the effectiveness of literacy approaches and outcomes. The term " Computer-Based National Assessment " refers to the fact that it is administered using computers. All academic positions, including those at SD, SMP, SMA, and SMK, are evaluated by CBNA. In response to the Covid-19 outbreak, the Ministry of Education and Culture's Center for Studies and Learning (Pusmenjar) implemented the Computer-Based National Assessment (CBNA) for the country's elementary and secondary school systems. Class V students attend SD/MI, Class VII students attend SMP/MTs, and Class XI students attend SMA/SMK.

Permendikbudristek No. 17 of 2021, released by the government on July 12, 2021, also addresses and estimates the National Assessment. It goes on to say that, while educators and education units estimate student achievement, the National Assessment's purpose is to evaluate the primary and secondary education systems. The Videlicet Minimum Competency Assessment, the Character Survey, and the Learning Environment Survey are examples of national assessment instruments. The basic competency assessment instrument assesses students' cognitive literacy in reading and mathematics. The Character Survey examines students' values, worldviews, and

behavioral tendencies. The Learning Environment Survey instrument assesses literacy standards and the school environment promoting literacy.

To find out more about the state of the academy, including its operations, systems, installations, and structures, an environmental survey was directed to schools, while a minimum competency assessment instrument and a character survey were conducted for students. The information and data entered provides a summary or profile of the strengths and weaknesses that need to be corrected in each academy, and the Ministry of Education and Culture and the education office will also monitor this ([Rijoly & Patty, 2021](#)). The purpose of the assessment, UN preparation, implementation of the assessment, and UN financing are regulated in Permendikbudristek No. 17 Year 2021.

Preparation is a process that must be carried out to build and support the CBNA. In mid-2021 the preparatory technical instructions for implementing CBNA will be further deepened regarding the management of facilities and infrastructure that need to be completed and prepared for implementing these activities.

Overall, CBNA provides results for schools and influences internal educational quality; schools can make significant improvements by referencing school report cards. Schools are attempting to prepare for CBNA by enhancing their existing experiences and capabilities, such as partnering with the local education office or conducting outreach to improve teachers' technological expertise. As a result of the instructor's expertise in the field of technology as a whole serving as a standard and source of guidance, the teacher can instruct each student on the proper implementation of CBNA. Before implementing CBNA, the school's intervention consists of special preparations. Students are prepared to understand reading and numbers through teacher-provided content ([Amanda, 2022](#)).

The Education Office at the elementary school academy level has implemented four stages of CBNA. The results of the coverage of the current implementation of CBNA in primary schools, are monitored and evaluated by supervisors. However, there are additional CBNA monitoring findings that will be completed later according to the schedule determined by the school administrator and school supervisor. It is necessary to perform surgery and write a report on the monitoring results achieved so that the CBNA monitoring results can be followed up in more detail and used as a reference in future timber strategies ([Ahmad, 2022](#); [Yuliza, 2022](#)).

Based on a survey conducted by Setiyowati, at MIN 9 HSU, CBNA is independent and online. The pre- CBNA stage, the CBNA implementation stage, and the post-CBNA stage are the three stages that make up the CBNA implementation process ([Setiyowati et al., 2022](#)). Socialization, preparing the activity implementing team to complete tasks during CBNA activities, preparing students who will participate in CBNA activities, and preparing resources such as computers and laptops to be used as

resources used in the implementation of CBNA are all included in the pre- CBNA stage. Because MIN 9 HSU has a solid workforce, adequate facilities, and infrastructure, and provides training for students who will excel in exams, the CBNA implementation there is in accordance with the established protocol and is running well without significant obstacles. Everything is fine, but the central server system is having problems on alternate execution days. Supervisors and technicians have also carried out post- CBNA conditioning according to established guidelines ([Setiyowati et al., 2022](#)).

Based on observations at 20 Baringin Public Elementary School, this school is a driving school accredited A. This school is participating in the CBNA as a replacement for implementing the Computer-Based National Exam (CBNE). This school has limited computer equipment. In which 30 participants participated in the Implementation of Computer-Based National Assessment with 15 computers. So, this activity was carried out in two waves.

this study aims to describe the Computer-Based National Assessment analysis results at 20 Baringin Elementary School, West Sumatra Province. It is hoped that the Computer-Based National Assessment analysis will measure cognitive and non-cognitive learning outcomes and the quality of the learning environment at SDN 20 Baringin, West Sumatra Province.

## METHOD

The descriptive qualitative research methodology was used to collect data and information about the implementation of CBNA in elementary school report. The results of the data analysis are then described to see how CBNA implementation at SD Negeri 20 Baringin. Research data were analyzed using the method developed by Miles and Huberman. This theory explains that there are three stages in conducting data analysis. The first stage is data reduction, data presentation, and conclusion and validation ([Sugiyono, 2017](#)).

In this study, the informants comprised school principals, vice principals, and teachers. Primary data was obtained from reading articles that included CBNA research through Google Scholar with a range of 2021-2022 and school report data. Researchers used the *snowball sampling technique* to select research subjects because to collect data using interview techniques could not be done on just one person but strengthened several informants who supported the arguments or opinions of the main informants. Researchers use this technique because The *snowball sampling* technique is carried out by selecting sources of information ranging from narrow to broad, until there are many sources of information, which aims to collect data until the data is collected and the context to be achieved is known ([Yusuf, 2017](#)).

This study used participant observation and unstructured interviews to obtain data. Data collection on this topic is done through observation. Researchers monitored the Principal and Deputy Principal during this activity. Unstructured interviews aim to get the informant's perspective in describing the topics discussed without any fear and anxiety from researchers in describing them ([Hartono, 2018](#)). Researchers tested its effectiveness using data triangulation.

## RESULTS AND DISCUSSION

One of the processes that show how well students learn and produce results is assessment, which must be included in the overall framework of the educational evaluation system in accordance with the law. This evaluation involves making judgments and using various assessment techniques to learn more about a student's learning outcomes or competency achievement level. Therefore, tests are created and given to students at certain times and locations under certain conditions to obtain grades. During the Covid-19 outbreak, questions and resources regarding literacy and numeracy evaluation will be innovated and always associated with mapping ([Fitria, 2022](#); [Prasetyo & Ilham, 2022](#); [Rijoly & Patty, 2021](#)). The Implementation of Computer-Based National Assessment (CBNA), which is used as an educational quality assessment tool, has replaced the Computer-Based National Examination (CBNE).

Researchers made observations at Baringin 20 State Elementary School (SD), located in the Batusangkar City area, Nagari Baringin, Lima Kaum District, Tanah Datar Regency. Initially, this school used the 2013 curriculum which has now changed to an independent learning curriculum with the status of a driving school in Tanah Datar District. This school has been accredited "A". SD Negeri 20 Baringin. This elementary school participated in the CBNA. This is in accordance with the expression of the Head of SD Negeri 20 Baringin, he said that the Computer-Based National Assessment is part of the process of mapping the quality of the education system, both in madrasahs or schools, elementary and secondary school programs which have been officially used as a cover for the Computer-Based National Assessment. or what we usually call UNBK. What if in this CBNA the assessment process is not carried out effectively. The Ministry of Education and Culture explained that CBNA is an assessment that focuses on assessing starting from process input and learning workforce through a series of certain stages where implementation, for now, can be carried out online and semi-online.

Thus this activity is also in line with the opinion of Sukma Ayu Kharismawati ([2022](#)) with the title "Evaluation of the Implementation of Computer-Based National Assessment in Remote Elementary Schools", which states that starting with the final evaluation system of elementary and secondary education. There are ongoing issues with how the final level of evaluation is being implemented. This issue calls for the habit of reading and teaching online, especially in the midst of the Covid-19 pandemic

that rocked Indonesia. The National Examination will be replaced with a Computer-Based National Assessment starting in 2020 by the government's Ministry of Education and Culture. The National Assessment seeks to change the paradigm of primary and secondary education assessment. Therefore, the Computer-Based National Exam (CBNE) was changed to Implementation of Computer-Based National Assessment (CBNA) ([Kharismawati, 2022](#)).

The government issued Permendikbudristek No. 17 of 2021, dated 12 July 2021, concerning the National Assessment, which stipulates that the National Assessment is designed to cover and estimate the primary and secondary education system while educators and education units estimate student achievement. The National Assessment uses three instruments: Minimum Competency Assessment, Character Survey and Learning Environment Survey. Permendikbudristek No. 17 of 2021 also regulates the object of the National Assessment, the treatment of the National Assessment, the implementation of the National Assessment, and supporting the National Assessment.

The results of the interview with the Principal of SD Negeri 20 Baringin revealed that " CBNA aims to improve and develop student character. The school's deputy principal proved this that whether it is enforced, we know, it is not just a process of mapping the education system and advancing education in Indonesia. But further than that, the important thing that comes from the development of assessment instruments, the first to improve the quality of tutoring and literacy is to improve the quality of tutoring and literacy where anyone can see the improvement in the quality of learning.

Tutoring and literacy need to be improved if the process of tutoring and literacy goes well. Of course, the learning outcomes from scholars will also be maximized. Second, improving knowledge chops, namely improving knowledge chops for actors through measuring the extent to which knowledge chops are read. This, of course, can be used as evaluation material to be suitable for improving each student's numeracy skills, and third, to improve numeracy skills to perfect students' numeracy skills which are expected to become students' numeracy skills.

Assessment Computer-Based National Assessment (CBNA) intends to improve the quality of learning and instruction based on the findings of interviews with the head and deputy head of SD Negeri 20. It aims to explicitly enhance and build student character through literacy and numeracy exercises. As a result, this term is consistent with Amanda's claim that Computer-Based National Assessment (CBNA) aims to improve students' skills and personalities ([Amanda, 2022](#)). As a result, we can read that Evaluation aims to develop students' abilities and personalities through literacy and numeracy activities, as well as environmental survey activities, to improve the quality of teaching and learning in schools, as well as evaluation material.

Implementation evaluation The Computer-Based National Assessment (CBNA) stage begins in one of the Tanah Datar District's approved driving schools, SD Negeri

20 Baringin. They use their own infrastructure and facilities, such as computers, to implement CBNA. Interviews with the principal of SD Negeri 20 Baringin revealed that socialization with parents and students is currently the priority. Students who will participate in the CBNA must verify their data by visiting the [annbk.kemendikbud.go.id](http://annbk.kemendikbud.go.id) website or entering their information using the login and password provided by their education unit. Then, begin the process of synchronizing the data, which was all produced at the start of the first semester. This can be done online, so thirty fifth-grade students from SD Negeri 20 Baringin are taking part in this activity. The second must issue a Decree in order to prepare the CBNA team. The final step is to choose the technicians and proctors who will be with students during CBNA testing. The fourth task is to create minutes and rules for CBNA activities. Then, evaluate the CBNA questions.

Then ensure that existing devices can be used or operated. Then analyze the CNBE question earlier. Carry out the simulation minus 3 x then analyze the results of the CNBE. Then this statement was reinforced by the deputy head of SD Negeri 20 Baringin who said that at this preparatory stage, the most important thing was the funding. Which is the funding for Assessment activities. The Computer-Based National Program (CBNA) at SD Negeri 20 Baringin came from BOS Regular in the amount of 500,000 to purchase snacks for CBNA participants. Meanwhile, an honorarium for supervisors is not permitted.

The results of this interview are in line with Ahmad's opinion (2021) in his writing that in his monitoring at the CBNA preparation stage several items had to be prepared, such as school achievements and their accreditation, the number of CBNA participants, CBNA implementation schedule, number of staff accompanying CBNA activities such as technicians, proctors and supervisors, preparation of facilities and infrastructure such as computer use, rules for implementing CBNA, minutes of CBNA implementation, as well as attendance list for CBNA implementation ([Ahmad, 2022](#); [Nasution & Surbakti, 2020](#)).

The readiness for implementing CBNA was also raised by Rahmawati and friends (2021) with the title *"Implementation of CBNA on the Mental Readiness of Students"*, She revealed that implementing CBNA necessitates preparations in five key areas: student readiness, committee, facilities and infrastructure, ICT, electricity, and power grids. Students' readiness must be carefully considered. To conduct CBNA effectively, participants, including students, instructors, and school principals, must be well prepared in terms of favourable conditions. The committee's readiness, which is made up of technicians, proctors, and supervisors. The readiness of facilities and infrastructure, specifically the preparation of the computer for use, requires that electricity function properly readiness ([Malaikosa & Permata, 2021](#)).

The implementation phase also includes numeracy exercises, environmental



surveys, literacy activities, and personality assessments. Furthermore, the SD Negeri 20 Baringin head stated that this event would take place on September 19-20, 2022. This CBNA exercise was aided by technicians, proctors, and supervisors. This task took two days to complete. The first day included literacy exercises and personality assessments. On the second day, thirty SD Negeri 20 Baringin students participated in activities such as mathematics and environmental surveys. Because there were only 15 functional PCs, this task was divided into two batches. The implementation of the CBNA was accompanied by one teaching technician, one school supervisor from the Tanah Datar Regency's Office of Education and Culture, and one teacher in the capacity of proctor.



Figure 1. Implementation of CBNA at SD Negeri 20 Baringin

The deputy principal of SD Negeri 20 Baringin followed the principal's statement that three assessment tools were used in this implementation as part of a government test on how to improve education standards in Indonesia. The first is an evaluation of each student's minimum ability in reading, writing, and mathematics. The second is the character survey, which measures attitudes, values and dietary practices. Third, a study environment survey involving 30 students from each educational unit and measuring the effectiveness of various input components and teaching and learning processes in the classroom and at the educational unit level.

The results of the researcher's interview with the deputy principal align with Amanda's words *"from 2022 who stated that a character survey is used to measure the emotional learning outcomes displayed in Pancasila student profiles in order to ensure that Indonesian students have global competence and behave in accordance with Pancasila values"*.

Meanwhile, the learning environment survey was distributed to all participants in the education system, including instructors, students, and school administrators. The learning environment survey's goal is to gather information about the school's current situation. SD Negeri 016 Loa Kulu began phased preparations for CBNA implementation three months before its implementation. CBNA was attended by thirty fifth-grade primary school students. The three components of the National Computer-Based Assessment (CBNA) that are used to map Indonesia's educational quality are the National Minimum Competency Assessment (AKM), Character Survey, and Learning Environment Survey.

The deputy principal of SD Negeri 20 Baringin also said that the school would receive an education report card that included literacy, character assessment and environmental assessment after carrying out a Computer-Based National Assessment (CBNA). We anticipate the outcome of the evaluation, namely the score for the educational unit. The education unit report card will have a spectrum of red, yellow, green, and blue. Where if the statement is red, the part that we need to follow in planning the next year's school budget. If it is blue, it must be maintained or increased through the process of transforming educational units into superior cultures. However, if we are in the yellow or green zones, we must take action by improving the indicators measured in the education unit. The color spectrum of all educational students' achievements will be visible. This is a reflection of the education unit, beginning with the students, teaching facilities, and infrastructure. This serves as the foundation for identifying a number of activities that must be included in the budget plan for the following year.

The interview results are consistent with [Prasetya](#) and colleagues' writings (2022). He stated that the report education to be the results of assessments held in primary and secondary education units can aid in the identification of problems, evaluation of the quality of the learning environment, and attainment of quality standards. The education report card allows education units to evaluate the strengths and weaknesses of education services, allowing for adequate quality development planning. Similarly, education report card scores may provide accurate information for consideration. CBNA activities include the formation and improvement of high-quality educational units, the outcomes of which can be documented using a color spectrum such as red, yellow, green, and blue ([Prasetya et al., 2022](#); [Tahili et al., 2021](#)).

Based on the results of an interview with the head of SD Negeri 20 Baringin, it was revealed that from the report the school had to carry out an analysis of which parts had to be improved by putting it into the form of an Annual Work Plan (RKT) from the annual work plan, the school had to make activities that could support the education report card. which are still low are stated in the form of numbers or school work plan budgets . Stages of the quality mapping process obtained from the education report card be the result of the Computer-Based National Assessment (CBNA).

In the CBNA context, the implementation of education management based on information and communication technologies has the potential to significantly enhance the efficacy and productivity of learning. Despite the fact that many students do not understand the exam on a psychological level, the effectiveness of the computer-based national assessment activities at SDN 20 Baringin has the potential to significantly affect educational management and serve as a model for education in the future.

The education report card findings were reviewed to determine which components of the quality standard still lacked adequate scores, and then a strategy to

meet the quality criteria was developed. The planning document for achieving quality standards is developed in accordance with the school's vision and mission by analysing priority programs. The quality fulfilment process follows, and it is based on the document outlining the quality standard accomplishment plan. All existing school components must follow this procedure. The final phase is the process of analysing quality achievement to determine the magnitude of the program's performance and to generate a list of recommendations that will serve as the foundation for establishing a sustainable quality development program. Computer-based national assessment can facilitate active, constructive, collaborative, deliberate, conversational, contextualized, and reflective learning.

## CONCLUSION

The implementation of the Computer-Based National Assessment at SDN 20 Baringin has started the preparation stage, which includes participant registration activities, socialization with parents, school achievements and accreditation, the number of participants, the implementation schedule, the number of staff accompanying activities such as technicians, proctors, and supervisors, and the preparation of facilities and infrastructure such as utensils. The following two days are devoted to the implementation phase. The first day of the literacy and character assessment. The second day of counting and environmental surveying. The evaluation can be displayed using color on the education unit reporting cards. The education report card results were reviewed to determine which components of the quality standard still required scores, and then a strategy was developed to meet the quality criteria. The findings indicate that (1) the continuous implementation of the CBNA is consistent with the standard operating procedure (SOP) established by the board of national education standards. The CBNA implementation can also be used to improve the performance of (3) the final examination system, which can measure the competency of graduates on specific courses on a national scale by referencing the Graduate. In the final remarks, an effort is made to encourage the expansion of future research about CBNA implementation in Indonesia.

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