Empowering Education: Transforming Assessment Through an Automated Portfolio Generator in Alignment with NEP 2020

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***Abstract*—This research study puts forward an innovative approach for student assessment through the creation of an Automated Portfolio Generator (APG), which takes into account the changing environment of modern education. This tool, which is based on the ideas of the National Education Policy 2020 (NEP 2020), promises to modernize assessment methods by giving teachers, students, and parents thorough understandings of how well their children are doing across many different aspects. The APG makes use of cutting-edge tools like data integration, machine learning, and natural language processing to compile information from a variety of sources, including test scores, extracurricular involvement, teacher evaluations, and tailored assessments. Each student receives a unique portfolio that is tailored to their learning preferences, areas of strength, and areas in need of development. The APG is an effective instrument since NEP 2020 puts a strong emphasis on holistic development and tailored learning. In order to make well-informed interventions and instructional strategies, educators obtain real-time insights about students' academic progress. The tool closes the communication gap between parents and teachers by providing parents a clear picture of their child's overall development. In addition to addressing the shortcomings of conventional assessment techniques, this research advances educational practices. The APG aligns with NEP 2020's vision for evidence-based educational practices by forecasting future academic trajectories and identifying potential support areas through extensive data analysis.**

***Index Terms*—Automated Portfolio Generator, Student Assessment, Holistic Development, Personalized Learning, National Education Policy 2020, Educational Technology, Data Integration, Machine Learning, Natural Language Processing, Teacher-Parent Collaboration.**

I. INTRODUCTION

With the establishment of the National Education Policy (NEP) 2020, which emphasises comprehensive and multidimensional evaluations, the landscape of educational assessment has undergone considerable changes. This policy acknowledges the necessity for assessments that go above and beyond conventional techniques to determine a student's overall growth. One such strategy that is gaining prominence is the usage of portfolios as a tool for assessing students' overall growth and accomplishments. Portfolios become a versatile tool in this situation for evaluating pupils' development and ability on a variety of levels.
Portfolios are characterised by Tierney, Carter, and Desai (1991, p. 43) as concrete proof that not only displays students' achievements and talents but also acts as a dynamic representation of their journey and calls for ongoing revisions to reflect personal development and changes. Portfolios are defined by Paulson, Paulson, and Meyer (1991) as deliberate collections of student work that demonstrate their development, attempts, and successes across a range of subjects. Students actively participate in the selection of the collection's materials, standards, and self-reflection. As a result, portfolios promote self-directed learning by giving an extensive view of students' performance within contextual contexts (Paulson et al., 1991).
Portfolios do provide a comprehensive assessment strategy, but they are not without difficulties. The shortcomings of portfolio evaluations are well known. According to Christian (1993), Frazier et al. (1993), Harlin et al. (1992), Johns (1992), Maeroff (1991), Palmer et al. (1992), and K. Wolf (1993), one important disadvantage of these programmes is the

extra workload they place on instructors. Furthermore, due to the extra time allotted for portfolio management, worries have been expressed about the possibility of disrupting teaching and learning (Christian, 1993; Metzger & Bryant, 1993; K. Wolf, 1993). There have also been discussions about the efficacy of portfolio assessment due to concerns about uniformity, dependability, and validity (Metzger & Bryant, 1993; Moje et al., 1994).

The development of AI-enhanced automated portfolio generators presents a viable answer to the problems with conventional portfolio analyses. This project, currently under construction, makes use of AI's capabilities to strengthen portfolio assessment's effectiveness by reducing its flaws. The automated portfolio generator is a prime example of technological innovation that is in line with the demands of modern schooling. This project intends to reduce the workload on teachers and provide standardized and consistent assessment practises by streamlining portfolio development, evaluation, and management using the power of AI.

This research article intends to explore the holistic assessment landscape while concentrating on portfolio evaluations as a multidimensional evaluation tool in light of the aforementioned factors. The paper will examine the shortcomings and difficulties of portfolio assessments and examine how the newly developed automated portfolio generator, powered by AI, has the potential to revolutionise the assessment process by giving teachers and students a quick, precise, and insightful way to assess overall development.

We shall go deeper into the specifics of portfolio assessment, its benefits, and its drawbacks in the following portions of this essay. We'll also look at how AI-driven automated portfolio generators can reduce the difficulties associated with doing traditional portfolio assessments, providing a preview of how comprehensive student evaluation may develop in the future.

The automated portfolio generator represents a conceptual shift in how education is evaluated, not just a technological advance. This research paper intends to add to the ongoing discussion surrounding efficient, comprehensive assessment procedures in line with the objectives set forth by the NEP 2020 by deeply examining the benefits and drawbacks of portfolios as well as the potential of AI-driven automation.

II. OBJECTIVES

1) To Understand Teachers' Perspectives: Survey teachers to comprehend their awareness, competency, and viewpoints regarding portfolio assessments and technology usage in student evaluation and in educational activities.
2) To Identify Needs for Automation: Utilize the survey findings to highlight the requirements for automated assessments and to guide the creation of AI and ML algorithms and models for the tools.
3) To Develop Specialized Tools: Design and implement an AI-powered Automated Portfolio Generator, taking into account the teachers' feedback and insights gathered from the survey.
4) To Analyze Impact: Critically evaluate the potential effects of these automated tools on holistic student growth, considering teachers' perspectives and foreseeable challenges.

III. INFERENCES FROM THE SURVEY

In order to understand instructors' viewpoints on portfolio assessments and the use of technology in student evaluation and instructional activities, the current study will conduct a time-limited survey. It is significant to highlight that the survey does not offer a thorough analysis because of its time constraints; rather, it offers a snapshot of common trends and surface-level circumstances. This study serves as a preliminary investigation into teachers' familiarity, competence, and openness to technology and AI tools with the goal of identifying emerging patterns and attitudes within the educational landscape. As a result, the survey's findings provide insightful information about current trends that can inform further in-depth research and provide prospective possibilities for integrating automated evaluations and AI-driven models for portfolio review. A total of 46 survey responses from educators were gathered, representing a range of age groups, educational backgrounds, subjects taught, and geographical locations. The poll aims to gather various viewpoints on portfolio evaluations and the application of technology in educational and student evaluation processes. The gathered information has been categorised and analysed to find patterns and insights in the educational field. The poll is broken up into many

areas to learn more about how educators feel about portfolio evaluations and using technology.

Demographic Information:
This section gathers basic details about the respondents, such as age group, education level, subjects taught, and region.

Familiarity with Portfolios:
This section focuses on educators' awareness and familiarity with the concept of portfolios as an assessment tool.

Technology Usage:
This section explores how often educators use technology in their teaching activities.

Use of AI:
This section investigates whether educators have integrated AI tools into their teaching practices.

Willingness to Embrace Technology and AI Tools:
This section delves into educators' openness to exploring and using technology and AI tools in their educational activities.

Awareness with Portfolios:
1. Educators aged 35-44 and 45-54 generally exhibit awareness with the concept of portfolios, while younger educators (under 25) seem less aware.
2. Compared to respondents with bachelor's degrees, those with master's or doctoral degrees frequently exhibit greater portfolio awareness.
3. Teachers of areas like mathematics, science, and language arts demonstrate a greater level of portfolio awareness than other educators.

Technology Use:
1. Educators across various age groups and educational levels express varying levels of technology integration in their teaching, with a trend towards higher usage among younger respondents.
2. There's a notable disparity in technology use between different subjects, with Mathematics and Science educators integrating technology more frequently.

Willingness to Embrace AI Tools:
1. Younger educators (under 25) and those aged 35-44 demonstrate a strong enthusiasm for exploring and experimenting with AI tools in their teaching.
2. Respondents with master's or doctoral degrees show greater openness to adopting AI tools than those with bachelor's degrees.
3. Educators from various regions, including Rajasthan, Gujarat, and Delhi, are open to exploring AI tools to enhance their teaching.

Requirements for Automated Assessments:
1. The survey highlights a varied landscape of technology use, with some educators embracing it more than others.
2. Educators' express openness to using technology for assessment purposes, suggesting a potential need for automated assessment tools.
3. Respondents with limited knowledge of portfolios express interest in learning more, indicating a need for tools that can assist them in understanding and implementing portfolio assessments.

AI and ML for Portfolio Assessment:
1. Educators who regularly use technology and AI tools, especially those aged 35-44 and 45-54, could benefit from AI-based models for portfolio assessment.
2. The survey identifies a willingness to experiment with AI tools, implying that educators are open to the idea of using AI and ML algorithms to enhance assessment procedures.
3. Educators teaching Mathematics, Science, and Language Arts subjects could particularly benefit from AI algorithms to streamline portfolio assessment processes.

Guiding AI and ML Algorithm Development:
1. Responses from educators in various regions could guide the development of AI and ML algorithms tailored to the needs of different educational contexts.
2. Educators' openness to technology and AI tools signifies a potential receptiveness towards adopting AI-driven solutions for student evaluation.
3. Educators with higher education degrees could serve as early adopters and guides for

implementing AI and ML models in portfolio assessment.

IV. DEVELOPING THE CONCEPT OF AN AUTOMATED PORTFOLIO GENERATOR

What are the different types of input the portfolio will entertain, and how those inputs will be analysed?
Analyzing Student Data for Personalized Interventions

1) Academic Information - Regression Analysis:
- Use regression analysis to uncover relationships between study habits, attendance, and academic performance.
- Example: Identifying a student's strong subjects (math, science) vs. weaknesses (language arts) for career guidance.

2) Behavioral Information - Sentiment Analysis:
- Apply sentiment analysis to feedback for insight into student attitude and engagement.
- Example: Positive teamwork feedback suggesting potential for leadership roles.

3) Learning Style - Clustering Algorithms:
- Employ clustering algorithms to group students by learning style (visual, kinesthetic, etc.).
- Example: Tailoring teaching methods (kinesthetic learning = hands-on activities).

4) Individualized Assessments - Decision Trees:
- Decision trees pinpoint specific skills and areas needing improvement.
- Example: Identifying strong problem-solving skills leading to analytical fields.

5) Extracurricular Activities - Text Mining:
- Text mining extract’s themes from activities, highlighting hidden interests.
- Example: Debate club involvement suggests strong communication skills.

6) Personal Interests and Goals - NLP:
- NLP analyzes aspirations for custom interventions.
- Example: Creating projects related to environmental science for aspiring scientists.

7) Attendance and Punctuality - Time Series Analysis:
- Time series analysis detects attendance patterns, impacting performance.
- Example: High attendance correlating with strong academics.

8) Social and Emotional Development - Clustering and PCA:
- Clustering and PCA categorize students based on emotional intelligence and resilience.
- Example: High emotional intelligence indicating group project compatibility.

9) Health and Wellness - Correlation Analysis:
- Correlation analysis connects health factors (sleep, diet) to academic performance.
- Example: Poor sleep affecting concentration during classes.

10) Family Background and Support - Descriptive Statistics:
- Descriptive statistics compare academic success across family backgrounds.
- Example: Low-income students may need extra support.

Portfolio Data Types and Analysis Approaches
1. Quantitative Data Analysis:
Test Scores:
Analysis of central tendencies using statistics (e.g., mean, median) to ascertain the student's position in relation to peers. Analyse the trajectory of your scores over time to spot performance trends like growth, stagnation, or deterioration.

Attendance Records:
Analyse the relationship between attendance and academic achievement to see if a student's absences have an impact on their marks. Determine absenteeism trends (such as particular days of the week) that might point to external difficulties.

Participation in Extracurricular Activities:
Quantitative metrics could include the number of activities participated in, hours dedicated, awards won, etc. This data can provide insights into students' interests, time-management skills, and social involvement.

2. Qualitative Data Analysis:
Teacher Feedback:
Sentiment analysis to determine the overall tone of the feedback (positive, negative, neutral). Theme detection to identify recurring points of praise or concern.

Self-assessment & Peer Feedback:
Look for similarities and differences by analysing. A student may have problems with their own perspective or with how others perceive them if their appraisal of themselves considerably differs from that of peers or teachers. Once more, insights can be gained from sentiment and topic analysis.

3. Multimedia Data Analysis:
Project Files & Presentations:
Video presentations could be analysed by machine learning algorithms for their clarity, assurance, and communication abilities. Text analysis software can assess the complexity, coherence, and grammar of written work.

Scanned Artwork or Handwritten Assignments:
Visual recognition algorithms can be used to assess the quality and complexity of artwork. Handwriting analysis might provide insights into neatness, organization, and care in assignments.

4. Standardized Assessment Data Analysis:
Compare the student's performance against: District, state, or national averages.
Their past performance to see growth or areas needing attention. Break down results by subject or skill area to identify specific strengths and weaknesses.
Final Assessment and Insights: Given all these analyses, the system can provide a holistic assessment of the student across various domains:

Academic Standing:
Based on test scores and standardized assessments, where does the student rank academically?

Skills & Competencies:
Analyze performance in projects, presentations, and extracurricular activities to deduce strengths (e.g., leadership, teamwork, creativity).

Engagement:
Based on attendance and participation, how engaged is the student in school activities?

Emotional & Social Indicators:
What can be inferred about the student's emotional well-being and social skills based on qualitative feedback?

Potential Areas of Concern:
Are there indicators of potential issues, be it declining academic performance, negative sentiment in feedback, or patterns in absenteeism?

V. ENSURING DATA ACCURACY IN THE PORTFOLIO GENERATOR

Data Validation: Implement validation checks at the point of data entry. For instance, if a teacher inputs an extremely high or low grade, the system could trigger a validation alert.

Cross-reference data:
For instance, if a student's reported attendance suddenly drops dramatically, the system could prompt a verification process.

Data Verification:
Before being included to the portfolio, allow for the examination and verification of the data. This might entail a teacher verifying student data or students attesting to their accomplishments. Consider linking with authoritative databases to automatically verify accuracy for crucial data, such as test scores.

Feedback Loop:
Allow for teachers, parents, and students to report discrepancies. This could trigger a review process to correct any inaccuracies promptly.

Audit Trails:
Maintain a history of changes made to the portfolio. If a piece of information is modified, it's important to have a record of who made the change and when

Trust and Transparency:
Establishing clear communication that accurate and honest data is crucial. Highlight the benefits of accurate data in generating meaningful insights and recommendations.

Collaborative Review:
Encourage teachers, parents, and students to collaborate in reviewing and verifying the data. This can enhance the accuracy and reliability of the portfolio.

Machine Learning Checks (Advanced):
Implement anomaly detection algorithms that can flag unusual or inconsistent data entries. For instance, if a student's grade suddenly jumps from a D to an A without reasonable explanation, the system could highlight this for review.

VI. ENHANCED SOCIAL NETWORKING FEATURE:

Collaboration and Connection:
Give youngsters the latitude to include information in their portfolio about their interests, skills, and objectives. Activate a search function so that students can find classmates who share their characteristics, interests, and goals. When looking for suitable partners, students might filter results based on subject areas, extracurricular activities, skills, etc.

Project and Study Groups:
Provide a platform for students to create or join study groups, project teams, or clubs based on shared interests. Students can view profiles and contact others they'd like to collaborate with.

Recommendations for Collaboration:
On the basis of common characteristics and objectives, the system could suggest potential collaborators. For instance, the system might recommend that two students work together on a coding and design project if one student excels in computer science and the other is enthusiastic about graphic design.

Benefits of Enhanced Social Networking:
Cross-Disciplinary Learning: Students can connect with peers who bring different skills and perspectives to the table, enriching their learning experiences.

Real-world Collaboration:
This feature mirrors real-world collaboration and project teams, preparing students for future professional environments.
Holistic Growth:
Collaboration and networking skills are essential for personal and professional growth. This feature encourages the development of these skills.

Peer Support:
Students facing similar challenges can provide emotional support and share resources to overcome obstacles together.

Engagement and Motivation:
The social aspect can increase engagement with the portfolio tool, making it more than just a record-keeping system.

Predictive Analytics for Future Trajectories and Support:
Data Collection and Analysis:
The system accumulates historical data about a student's academic performance, extracurricular activities, teacher feedback, attendance, etc. Using machine learning algorithms, the system analyzes this data to identify patterns, correlations, and trends.

Identifying Strengths and Trends:
By comparing the student's performance in different subjects, the system can pinpoint areas where the student demonstrates strengths or natural aptitude. For instance, if a student consistently excels in math and science, it indicates potential in STEM fields.

Mapping Historical Progress:
The system tracks students' academic progress over time, indicating whether they're consistently improving, plateauing, or facing challenges.

Correlations and Context:
The system examines how different factors might correlate with academic performance. For example, does consistent attendance with better grades?
It also considers contextual information. For instance, if a grade dip coincides with a change in extracurricular involvement, it might suggest potential stressors.

Forecasting Future Pathways:
The system can forecast possible future trajectories for the student based on historical data, trends, and correlations.

For example, if a student's grades in literature have been consistently high, the system might predict success in advanced literature courses.

Identifying Areas for Support:
The system can flag potential challenges by detecting areas where a student's performance is declining or inconsistent. If the student's performance in math suddenly drops, it might indicate a need for additional support or intervention in that subject.

Generating Recommendations:
If the system identifies a potential area of struggle, it can recommend specific resources or interventions. For instance, if a student's performance in writing is declining, the system might suggest writing workshops or tutoring.

Continuous Learning Loop:
As new data is added to the portfolio, predictive analytics continuously updates its predictions, offering more accurate insights over time.

Benefits of Predictive Analytics:
Early Intervention: Detecting potential challenges early allows educators to address them before they become significant issues.

Personalized Support:
Recommendations are tailored to the student's specific needs, promoting effective interventions.

Guided Decision-making:
Students can use the predictions to make informed choices about their course selections and extracurricular activities.

Holistic Approach:
Predictive analytics considers many factors, offering a comprehensive view of the student's journey.

VII. USER INTERFACE

1. Teacher's Dashboard:
Overview of All Students:
Displays a list of all students the teacher is responsible for Provides a snapshot of each student's key information, such as overall performance, attendance, and engagement.

Input Tools:
Teachers can input data related to their respective students. This could include grades, attendance records, qualitative feedback, and observations.

Portfolio Generation:
Teachers can generate portfolios for individual students or the entire class.
They can customize portfolio templates based on the student's grade level, subject, and unique needs.

2. Student's Dashboard:
Portfolio Overview:
Provides a comprehensive view of the student's academic journey, extracurricular activities, achievements, and personal reflections.
Interactive visualizations show growth, performance trends, and areas of strength.

Personal Reflections:
Allows students to add personal reflections on their learning experiences, challenges faced, and goals for the future Offers a space for students to express themselves and gain self-awareness.

Feedback View:
Displays teacher feedback and comments on assignments, projects, and assessments.
Encourages students to learn from feedback and identify areas for improvement.

3. Parent's Dashboard:
Child's Portfolio Overview:
Parents can view their child's portfolio, including academic achievements, extracurricular involvement, and personal reflections Offers a holistic view of their child's progress and development.

Feedback and Communication:
Parents can view teacher feedback and communicate with teachers directly through the dashboard.
Provides a channel for parents and teachers to discuss the student's performance and growth.

Holistic Analysis Across Dashboards:
Data from all three dashboards is consolidated to build a holistic student profile By examining academic performance, attendance, instructor feedback,

extracurricular activity, and personal reflections, the system produces insights that go beyond grades.
In order to provide a thorough insight of the student's strengths, areas for improvement, and alternative pathways, the system looks for patterns, correlations, and trends.
For instance, the holistic analysis would advise considering engineering or STEM-related jobs if a student excels in arithmetic, actively engages in the robotics club, and frequently exhibits leadership traits.

VIII. DATA PRIVACY ISSUES

Secure Data Storage:
The tool ensures that all student data is securely stored using encryption and other security measures, reducing the risk of unauthorized access.

Limited Access:
Only authorized individuals (teachers, parents, students) have access to specific portfolio sections, enhancing privacy.

Selective Sharing:
Students and parents can choose what information to share and with whom, maintaining control over their data.

Consent and Transparency:
Clear consent is obtained from parents and students before collecting and using their data. The purpose and usage of data should be transparent.

Data Minimization:
Only necessary data is collected and stored, reducing the amount of personal information vulnerable to breaches.

Anonymization:
Sensitive information, such as teacher feedback, can be anonymized to protect the identities of both students and teachers.

IX. ETHICAL GUIDELINES

Informed Consent:
Obtain informed consent from parents and students before collecting any data. Clearly explain how the data will be used and who will have access to it.

Data Security:
Implement strong security measures to protect student data from breaches and cyberattacks.

Transparency:
Ensure transparency about how data is collected, processed, and used. Individuals should know what data is being collected and for what purpose.

Minimize Biases:
Be vigilant in identifying and mitigating biases that might arise from using the data for predictions. Ensure fairness and equity in interventions.

Use of Predictive Analytics:
Use predictive analytics responsibly and avoid making irreversible decisions solely based on predictions. Predictions should guide decisions, not dictate them.

Data Ownership:
Clearly define who owns the data and how it can be used beyond the portfolio tool. Data should not be used for commercial purposes without explicit consent.

Regular Updates:
Keep parents, teachers, and students informed about how the tool is evolving, what changes are being made, and how data will be used to enhance their educational experience.

Data Retention:
Define clear guidelines for how long data will be retained and when it will be deleted.

Accountability:
Establish protocols for addressing data breaches or misuse of data and hold responsible parties accountable.

Training and Awareness:
Ensure that teachers, students, and parents are educated about data privacy and ethical considerations when using the tool.

X. RESULTS AND DISCUSSION

The National Education Policy (NEP) 2020 in India is a comprehensive framework designed to revolutionize

the education system, ensuring its relevance in the 21st century. An automated portfolio generator exhibits alignment with various key aspects of NEP 2020, underlining its pertinence in modernizing education. Here are the aspects covered by this tool:

Holistic Development:
The tool facilitates a holistic perspective of students' growth by seamlessly integrating academic achievements, extracurricular involvements, behavioral insights, and more. This resonance with NEP's emphasis on nurturing multifaceted student development.

Personalized Learning:
Through the creation of personalized portfolios, the tool caters to diverse learning styles, strengths, and areas requiring improvement for individual students. This concurs with NEP's advocacy for personalized and adaptive learning approaches.

Assessment Reforms:
Aligned with NEP's vision of competency-based learning, the tool employs a range of data sources for assessment, offering a comprehensive understanding of a student's competencies and overall progress.

Technology Integration:
The tool leverages technology extensively for data analysis, machine learning, and portfolio generation. This synergy is in harmony with NEP's emphasis on utilizing technology to enhance educational outcomes.

Teacher Empowerment:
By furnishing educators with insightful information about student strengths and weaknesses, the tool empowers teachers to devise tailored interventions and instructional strategies.

Parent-Teacher Collaboration:
The tool's provision to share student portfolios with parents fosters stronger parent-teacher collaboration, aligning with NEP's objective of involving parents in their child's education.

Student-Centric Education:
Facilitating students' active participation in their educational journey, the tool empowers them to reflect on their progress, set goals, and monitor their growth, thereby promoting student agency and involvement as per NEP's principles.

Skill Development:
Through the analysis of individualized assessments and extracurricular engagements, the tool identifies students' non-academic strengths and skills, in harmony with NEP's focus on holistic skill development.

Data-Driven Decision Making:
The tool's analytical insights guide educators in evidence-based decision making, aligning with NEP's call for employing data to inform educational practices.

Flexible Learning Pathways:
The tool's insights into potential academic trajectories and interventions allow educators to offer tailored learning pathways aligned with individual student aspirations and needs, reflecting NEP's flexible emphasis.

XI. CONCLUSION

To sum up, the idea of an automated portfolio generator is a paradigm shift in the field of education and is in perfect harmony with the aspirational objectives set forth in the National Education Policy (NEP) 2020. We have examined the many facets of this cutting-edge tool in this study article, analysing how it might completely alter how assessments are conducted for educators, students, and other stakeholders in the educational process.
This article has uncovered the significant advantages that an automated portfolio generator brings to the fore. The programme provides a thorough view of a student's development by smoothly combining several data streams, taking into account not only academic prowess but also extracurricular successes, behavioural insights, and personal improvement. The tool's personalised learning templates strongly align with NEP's call for adaptive and student-centered education because they let learners advance at their particular pace and in their own learning style.
The application also equips teachers with in-the-moment insights, enabling them to make wise decisions and launch prompt interventions. Its capacity to encourage active parent-teacher

cooperation strengthens the educational ecosystem and forges an enduring relationship in the student's educational journey. Beyond academics, the tool's ability to recognise skills is an appropriate response to NEP's emphasis on skill-based learning and the development of comprehensive competencies.

Looking ahead, the automated portfolio generator has a lot of potential. It might develop into a tool for adaptive learning that encourages individualised instruction. It has an evident potential to advance educational research, teacher professional development, and international partnerships. The tool's importance in fostering lifelong learning and its ability to change to fit new paradigms in education solidify its status as a key tool in the ongoing evolution of education.

We have reached a point when an automated portfolio generator is not just a distant dream but a practical reality because to the combination of technical breakthroughs, changes in pedagogical paradigms, and the progressive aspirations outlined by NEP 2020. This study has illuminated the creative symbiosis between technology and education, paving the way for a time when evaluation surpasses traditional limitations and becomes a comprehensive growth trip. The automated portfolio generator is a pivotal stroke in the broad tapestry of educational reform, giving education a personalised, insightful, and collaborative feel. As we proceed along this route, the seamless blending of technology and education ushers in a new era, where the tool's influence matches the NEP 2020 concept — a holistic, equitable, and innovative education that prepares the way for empowered individuals and a lively society.

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