FROM MACAULAY'S MINUTE ON EDUCATION 1.0 (1835)
TO FUTURE READY PAKISTAN

MINUTE ON

EDUCATION 2.0 (2026)

A Curriculum for a Free Nation



"Authors, not interpreters."

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From interpreters to authors

1835 / THOMAS BABINGTON MACAULAY

“We must at present do our best to form a class who may be interpreters between us and the millions whom we govern; a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect.”

(Thomas Babington Macaulay, Minute on Education, 2 February 1835)

2026 / AHSAN IQBAL

“We must now do our best to form authors, not interpreters: Pakistanis in faith and heritage, and Pakistani also in taste, in judgment, in morals and in intellect — masters of the world’s knowledge, and makers of their own.”

(Ahsan Iqbal, Minute on Education 2.0, 21 October 2026)

A Minute on Education 2.0 for a Free Nation

Considerations for the ongoing curriculum reform

Dear Minister Education,

As the curriculum reform now under way moves towards its decisive stages, I am pleased to share with you a Minute on Education for a Free Nation, the Minute on Education 2.0, which I have prepared as a contribution from the Ministry of Planning, Development and Special Initiatives. In February 1835, Lord Macaulay's Minute on Education set out, with remarkable clarity, the purpose of an education designed to produce interpreters for an empire, and its imprint on our classrooms has outlived the empire itself. Nearly two centuries later, and on the eve of Pakistan's centenary, I believe we owe our children an equally clear statement of the opposite aim: an education that forms confident, ethical and capable Pakistanis, rooted in their faith and heritage, fluent in the world's knowledge, and equipped for the demands of Industry 4.0 and 5.0. The enclosed Minute is offered in that spirit, with full respect for the constitutional role of your Ministry, the National Curriculum Council and the provinces. I hope it will be of value as you and your colleagues carry this vital national undertaking forward.

FROM THE MINUTE / KEY MESSAGE

The curriculum is therefore the longest plan a nation makes.

1. The question before us

1.1 A nation's curriculum is the foundation on which everything else it builds will stand. Dams, motorways and ports are built on concrete; a nation is built on what its children are taught. Every institution a country will ever have — its parliament and its courts, its civil service and its armed forces, its farms, factories, laboratories and newsrooms — will be staffed by people a curriculum once formed. Their competence will be its competence, their integrity its integrity, their blind spots its blind spots. No nation has risen above the quality of its classrooms, and none has stayed down for long once its classrooms rose.

1.2 The curriculum is therefore the longest plan a nation makes. A budget binds a year. A development plan binds five. A curriculum binds how a generation thinks, and through that generation the capacity of a century. A flawed budget can be corrected next year. A flawed curriculum is corrected only after a generation has paid for it. The child who enters Class 1 in 2027 will still be at work when Pakistan marks its centenary in 2047. Our task is to ensure that this child leaves school able to live, work and answer for themselves in a world we cannot yet fully describe.

1.3 That world is being shaped by several forces at once. Artificial intelligence, automation and robotics are taking over the routine cognitive work for which rote schooling once prepared a clerk. Data and biotechnology are reshaping industry and agriculture. A harsher climate is redrawing the map of water, risk and livelihood in a country already among the most exposed. The old route — memorise, certificate, placement — is closing.

1.4 What the new economy pays for is not a fuller memory; today, it rewards a different capability: reading with understanding and working confidently with numbers; reasoning from evidence and telling fact from a fluent falsehood; using digital and AI tools while knowing where they fail; and learning, unlearning and learning again as work changes. Judgment, creativity, collaboration and the willingness to answer for a decision will carry the greatest value. Industry 4.0 supplies the machine; Industry 5.0 asks what the machine is for, and who bears its cost. For a latecomer nation, the decisive advantage is a mind that can create what it did not inherit. A curriculum that cannot build these powers trains children for a labour market that is dying, and withholds that advantage.

1.5 History is clear about the order of things. Meiji Japan, the Republic of Korea after the war, Singapore and China did not grow rich and then decide to educate. Each decided which economy it intended to enter, reshaped what its children learned in order to enter it, and tied the school firmly to a national purpose. Purpose came first. Prosperity followed.

1.6 Pakistan's stake is sharper than most. Nearly two-thirds of our people are under thirty. Whether that becomes a dividend or a burden will be decided in our classrooms. The goals of URAAN Pakistan exports on the way to a hundred billion dollars, a digital economy, climate resilience, energy security and equity are, at bottom, goals for human capability.

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Our task is to ensure that this child leaves school able to live, work and answer for themselves in a world we cannot yet fully describe.

1.7 Skill alone will not be enough, and neither will identity alone. A skilled graduate without roots and a rooted graduate without skill fail the country in different ways and to the same effect. We need both: a confident identity, and a capability that can stand in any company in the world, including the company of machines.

1.8 Our difficulty is not that we run a good system badly. It is that we run, quite efficiently, a system designed for another purpose and another century. I call it Education 1.0: the design fixed by Macaulay's Minute of 1835 and kept largely intact since 1947. It was built to produce interpreters for an empire. It is wrong for us on two counts: it was never designed for a sovereign people, and the world that made its graduates employable is disappearing. The first is an argument from dignity; the second, an argument from survival. Together they make reform urgent.

2. Purpose of this Minute

2.1 On 2 February 1835, Thomas Babington Macaulay wrote a Minute on Education that fixed the purpose of schooling in this subcontinent for more than a century. He knew what kind of person he wanted in a colony, and he said so. This Minute on Education 2.0 is offered, nearly two centuries later, with the opposite aim: an education that forms free minds for a sovereign nation.

2.2 A reform of curriculum is now under way. This is the moment to state its purpose plainly, before syllabuses, textbooks and examinations settle around an unstated one. I offer the considerations below to the Ministry of Federal Education and Professional Training, the National Curriculum Council, and the provinces and territories.

2.3 Under the Eighteenth Amendment, curriculum and school education are provincial responsibilities, and this Minute respects that settlement. It directs no province. It offers a national development perspective from the ministry charged with the country's long-term plan, aligned with URAAN Pakistan and the centenary in 2047. The National Curriculum Council, where the federation and the provinces sit together, is the natural forum to take this work forward, and Section 16 suggests how all governments might carry the reform jointly.

2.4 The aim, in one sentence: to develop knowledgeable, capable and ethical Pakistanis who have the confidence to belong, the freedom to inquire, and the ability to create value for their country and for humanity.

2.5 Textbooks alone cannot achieve that aim. Curriculum sets the destination, teachers carry the child there, and examinations decide what is rewarded, and therefore what is taught. The three must move together. Of the three, the examination exerts the strongest pull: what gets asked gets done. A reform that changes the textbook and leaves the paper untouched will change little that a student can see.

2.6 The Minute moves from diagnosis to vision to practice. Part One (Sections 3 to 5) sets out why Education 1.0 must give way. Part Two (Sections 6 to 8) states the philosophy of Education 2.0, the learner it seeks to form and the ten tests for every curriculum decision. Part Three (Sections 9 to

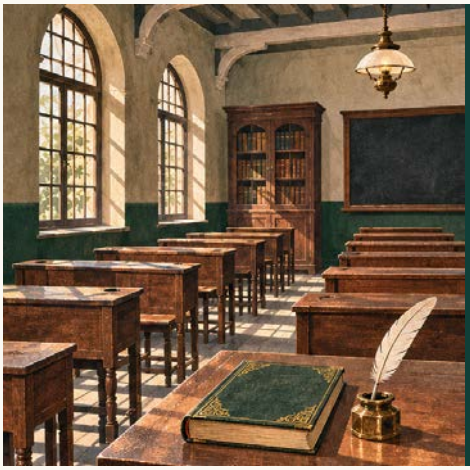
FROM THE MINUTE / KEY MESSAGE

Part Three (Sections 9 to 15) sets out the six strategic shifts, what children should learn, and what must change in language, examinations, technology, teaching and equity.

15) sets out the six strategic shifts, what children should learn, and what must change in language, examinations, technology, teaching and equity. Part Four (Sections 16 and 17) proposes how the federation and the provinces might carry the reform together and know that it is working. Suggested actions are annexed.

PART ONE - THE CASE FOR CHANGE

3. What Macaulay intended, and what remains to be undone



THE INHERITANCE

“Interpreters were useful to an empire. Authors are necessary to a free nation.”

3.1 Macaulay stated his purpose in the words that stand at the head of this Minute:

“We must at present do our best to form a class who may be interpreters between us and the millions whom we govern; a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect.” (Minute on Education, 2 February 1835) [1]

In the same Minute he he judged that “a single shelf of a good European library was worth the whole native literature of India and Arabia.” [1] The judgment went well beyond language. It decided which knowledge counted, whose history was worth teaching, and who was fit to think. A people told that its own inheritance is weightless will, in time, stop adding to it.

3.2 The system built on that Minute served an administration, and served it coherently. Purpose, pedagogy, language, assessment and the role of the teacher all pointed to the same end. A colonial state needed clerks who could carry out an instruction, not citizens who might question one. It prized accurate reproduction over original thought, deference over inquiry, and the certificate over the capability. These were design choices, not accidents. And because each part protected the others, the design has proved hard to reform piece by piece.

3.3 Seventy-nine years after independence, too much of that design remains. Examinations still reward memorisation most. Fluency in English is still treated as a proxy for intelligence and used

FROM THE MINUTE / KEY MESSAGE

A free nation masters the world’s knowledge and competes in it, and our students should command English as a language of research, trade and higher study.

as a social filter. Parallel school systems still divide children by the income of their parents. Textbooks still ask, in the main, for recall rather than reasoning. We inherited a machine for producing interpreters, and we kept it running.

3.4 Pakistan has not lacked education policies. Successive national policies since 1947, and more recently the Single National Curriculum, have each declared the aims of understanding, equity and national purpose. Few changed what is examined, how teachers are prepared, or what the system rewards. The reason goes beyond weak implementation: Education 1.0 has served those best placed to change it. English fluency confers an advantage on families who can buy it; the examination rations access predictably for those who know its rules; textbook, tuition and guide-book markets have grown around the existing paper. A system that rewards its own beneficiaries will not reform itself by circular. This Minute therefore treats reform as a question of incentives as much as of content. Past attempts changed content but left incentives untouched, launched nationally without pilots, and counted inputs while learning went unmeasured. That is the pattern this reform must break.

3.5 Alongside this inheritance, part of our education has been outsourced. In the June 2026 series, more than 100,000 Pakistani candidates from over 850 schools sat Cambridge O Level, IGCSE and A Level examinations, on syllabuses written, set and graded abroad. [14] The International Baccalaureate (IB), with its own curriculum and assessment model, is another internationally governed pathway offered in Pakistan. The Cambridge stream is small as a share of the age group, but its influence is large: these schools educate many of those who will lead our institutions, firms and media. The result is a class educated in Pakistan but not always for Pakistan - able and often fluent, yet too often thin in the history, languages and civic life of the country it will one day speak for. Pakistan Studies, Islamiyat and Urdu are widely taken, but they sit as papers inside a larger frame whose literature, examples and habits of mind are often drawn from elsewhere. Beside it, public schooling has hardened into a second nation within the first. Two nations within one school system is a question of national cohesion, not only of curriculum.

3.6 The fault is not Cambridge's; an examining body serves its own mandate, and serves it well. The fault is ours, for leaving the formation of so many future leaders to a mandate we did not write. Prohibition would punish families for a failure of the state. This principle applies to Cambridge and IB programmes alike. The remedy is national ownership: common national learning outcomes in Urdu, in Pakistan's history and heritage, and in civics and ethics for every stream, and national qualifications of such quality that families no longer need to look abroad. The families who chose the international stream were not rejecting Pakistan. They were rejecting Education 1.0. Education 2.0 must give them a reason to return.

3.7 The divide runs wider still. The madaris educate millions of children, many from the poorest families, largely outside the national curriculum and examinations. Low-fee private schools and non-formal programmes form further streams, with their own standards or none. One national standard means one floor for all of them, including, for madaris and non-formal programmes, the

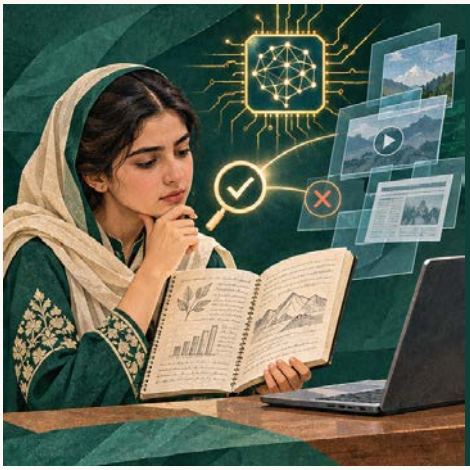
FROM THE MINUTE / KEY MESSAGE

What must change is the purpose of education: from producing interpreters of other people's knowledge to producing authors of our own.

foundations of literacy, numeracy and science, building on the mainstreaming work already under way and respecting each stream's distinct character. A national curriculum that reaches only the schools the state runs is not national.

3.8 None of this calls for rejecting English, Western scholarship, or any knowledge that is true. A free nation masters the world's knowledge and competes in it, and our students should command English as a language of research, trade and higher study. What must change is the purpose of education: from producing interpreters of other people's knowledge to producing authors of our own. Macaulay asked for a class that could explain us to them. Pakistan now needs a generation that can explain the world to itself, and add something the world did not have.

4. Why Education 1.0 has run out of world



JUDGMENT IN THE AGE OF AI

"The machine is now the interpreter."

4.1 Education 1.0 has been morally indefensible since 1947. It remained economically survivable only because the labour market kept paying for what it produced: a clerk who could reproduce a file accurately in English, a graduate who could recite a syllabus. That bargain is now ending.

4.2 The machine is now the interpreter. Macaulay wanted a class of interpreters. Within a few years, the interpreter has been automated. Language models and machine translation now translate, summarise, draft letters and reports, and reproduce knowledge in fluent English at almost no cost. The competence Education 1.0 was designed to produce is the first that artificial intelligence has made cheap. Every parent and every examination board should hear this plainly: a child trained only to reproduce is being trained to compete with a machine that reproduces better.

4.3 The same change erodes the premium on English fluency. When a farmer, a nurse or a small exporter can put a question to a machine in Urdu or Pashto and receive a competent answer, English ceases to be the only door to knowledge. It remains valuable, but it is no longer sufficient. What stays scarce is the judgment to ask the right question, test the answer, notice when it is wrong, and take responsibility for what follows.

FROM THE MINUTE / KEY MESSAGE

Educational modernisation should be judged by the depth of learning, not the number of screens in a classroom.

Knowledge is abundant not scarce; Skills age faster

4.4 Education 1.0 assumed that knowledge was scarce - held in the textbook, guarded by the teacher and verified by recall. A child with a phone now holds more information than any library Macaulay knew. Value has shifted from possessing knowledge to understanding, applying, verifying and creating it. Artificial intelligence also undermines the old assessment from the other side: homework and essays can now be produced by a machine in seconds, so assessment must move toward reasoning that is shown and defended - in class, in oral examination and in practical work. Examination reform has become a question of integrity as well as of learning.

4.5 Employers surveyed by the World Economic Forum expect close to two-fifths of core job skills to change by 2030. [24] The one-time education of 1.0 learn once, certify once, work for forty years cannot serve such a working life. Our young people will also work in more places than any generation before them. Remittances reached a record of more than 38 billion dollars in 2024–25, [19] but demand in the Gulf is shifting toward skilled and certified workers, and in online freelancing a young person in Turbat or Talagang now competes directly with one in Manila or Nairobi. Neither market pays for a certificate it cannot verify. Both pay for skill that can be demonstrated.

4.6 Technology has become a question of sovereignty. Power is passing through technology: computing, data, semiconductors, artificial intelligence, and the platforms on which a society talks to itself. Nations that build these capabilities will set the terms; those that only consume them will live under terms set elsewhere. Here lies the risk that should most concern a sovereign republic: a Macaulay 2.0. It need not be written by a governor-general. It can be written, without anyone intending it, by the algorithms that decide what our children see, and by AI systems trained on other languages and carrying other societies' assumptions about history, faith and value. A generation taught only to prompt, accept and forward would be interpreters once again. Education 2.0 must produce citizens who can direct and check these tools, and builders who can make our own — in our languages, and for our farms, clinics, courts and classrooms.

4.7 Truth itself has become contested ground. Fabricated images, AI-generated voices and organised information campaigns now reach a child before the teacher does. Education 1.0 taught the student to trust the text; Education 2.0 must teach the student to interrogate it. That is now a matter of social peace and national security.

Two designs compared

4.8 Taken together, these changes call for a different design, not a better-run version of the old one.

Dimension	Education 1.0 (1835 design)	Education 2.0 (for 2047)
Purpose	Interpreters and clerks for an administration	Authors, builders and citizens of a sovereign nation

FROM THE MINUTE / KEY MESSAGE

Examination reform has become a question of integrity as well as of learning.

Dimension	Education 1.0 (1835 design)	Education 2.0 (for 2047)
What counts as success	A certificate	Demonstrated capability and character
View of knowledge	Scarce; to be stored and reproduced	Abundant; to be understood, verified, applied and created
Role of the student	Receiver	Inquirer, maker and self-evaluator
Role of the teacher	Transmitter of the syllabus	Designer of learning, coach and professional, supported by technology
Language	English as a gate	Understanding in a familiar language; English and world languages as added powers
Assessment	One high-stakes paper, testing recall	Reasoning shown and defended; practical, oral and project evidence; a reformed paper
Technology	Absent, or used to deliver the same rote	A tutor and a tool, under human judgment; something we also build
Relation to AI	Competes with the machine at reproduction, and loses	Directs, checks and surpasses the machine; answers for the result
Equity	Sorts children by income and language	One national standard; every child brought to the foundations
Identity	Borrowed taste and judgment	Rooted in faith and heritage; equal in the world's company
Governance	Inputs announced; outcomes unmeasured	Piloted, measured, published and corrected

4.9 One warning belongs at the head of everything that follows. The most likely way for this reform to fail is not rejection but adoption in name only: Education 1.0 delivered with devices, the same rote and the same paper, now on a tablet. Laptops are not a curriculum. A screen that displays a page to be memorised is a more expensive blackboard. Educational modernisation should be judged by the depth of learning, not the number of screens in a classroom. International evidence is consistent that technology placed in classrooms without a change in teaching does not raise learning, and can lower it. [17] Used with purpose, however, technology can give every child something Pakistan has never been able to afford: a patient tutor in the child's own language. A supervised AI-tutoring pilot in Nigeria produced gains that World Bank evaluators ranked among the more effective education interventions they had studied. [18] For a country short of qualified teachers, especially in rural districts and for girls, that is a strategic opportunity provided the teacher stays in charge and learning is measured rather than assumed.

4.10 Nor is any of this an argument against knowledge or memory. Thinking cannot be taught in the abstract: a student reasons well about a subject only when they know it well, and facts held

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Every parent and every examination board should hear this plainly: a child trained only to reproduce is being trained to compete with a machine that reproduces better.

securely in memory free the mind for the problem at hand. Retrieval and regular practice are among the most reliable ways to make learning last. [28] Our own tradition honours the hafiz who carries the Quran in memory, because memory is the beginning of understanding, not its rival. The failure of Education 1.0 was to ask children to remember what they had never understood, and to examine nothing else. Education 2.0 must be knowledge-rich, with a sequenced core of essential knowledge in every subject.

5. Where we stand

25.37m	80%	<2%
children out of school	learning poverty	GDP spent on education
Census 2023 [10]	Pre-pandemic baseline [15]	Source note [20]

5.1 Any honest reform begins with its starting point, and ours is severe.

• Access: The 2023 Population Census counted 25.37 million children aged 5 to 16 out of school about 36 percent of the age group. More girls (13.41 million) than boys (11.96 million) are affected, and some 20 million have never attended school at all. [10] Article 25-A of the Constitution makes their education a fundamental right, not a residual.

• Learning: On the World Bank and UNESCO measure, 80 percent of Pakistani children at late primary age cannot read and understand a short, age-appropriate text, counting those out of school 21 percentage points worse than the South Asian average. [15] The figure predates the pandemic closures and the 2022 floods.

• Equity: Out-of-school rates range from about 15 percent in Islamabad and 27 percent in Punjab to 46 percent in Sindh and 58 percent in Balochistan. [10] Girls and rural children carry the heavier share, and one of the world's widest gender gaps in mobile phone ownership [22] means a careless digital reform would reach boys first and girls last.

• Finance: Public spending on education remains below 2 percent of GDP, [20] against an international benchmark of 4 to 6 percent. [21] Ambition that is not financed is not a policy. It is a hope.

• Climate: The 2022 floods damaged or destroyed tens of thousands of school buildings. Heat, flood and displacement must now be treated as design conditions for education planning.

5.2 These figures are the clearest indictment of Education 1.0: a system designed to select a few was never designed to educate all. No curriculum can succeed where the child is absent, the

FROM THE MINUTE / KEY MESSAGE

No curriculum can succeed where the child is absent, the teacher is unprepared and the examination rewards memory alone.

teacher is unprepared and the examination rewards memory alone. To reform the syllabus and leave the rest of the system untouched would be to paint the gate of an empty school.

PART TWO - THE VISION

6. The foundation: inquiry, the Quran and Iqbal



INQUIRY AND INHERITANCE

“A new world shows itself through new ideas; worlds are not born of stone and brick.”

The Quranic method

6.1 The first word revealed to the Prophet (peace be upon him) was Iqra “Read” (Al-Alaq 96:1). From its opening, the Quran treats knowledge as active engagement with the signs of Allah, in revelation and in the natural world. A civilisation founded on a command to read cannot, by its own founding text, confuse reading with repetition.

6.2 Surah Al-Imran states the method with a clarity no curriculum framework has improved upon:

إِنَّ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ وَاخْتِلَافِ اللَّيْلِ وَالنَّهَارِ لَآيَاتٍلِّأُولِي الْأَلْبَابِ الَّذِينَ يَذْكُرُونَ اللَّهَ قِيَامًا وَقُعُودًا وَعَلَىٰ جُنُوبِهِمْوَيَتَفَكَّرُونَ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ رَبَّنَا مَا خَلَقْتَ هَٰذَابَاطِلًا سُبْحَانَكَ فَقِنَا عَذَابَ النَّارِ

“Indeed, in the creation of the heavens and the earth, and in the alternation of night and day, there are signs for people of understanding — those who remember Allah standing, sitting and lying on their sides, and reflect upon the creation of the heavens and the earth: Our Lord, You have not created all this without purpose. Glory be to You; protect us from the punishment of the Fire.” (Al-Imran 3:190–191) [12]

6.3 These verses describe a complete cycle of learning: observation of the natural world as evidence to be studied; reflection, as the people of understanding (ulul albab) consider how creation works tafakkur is not an ornament of faith but a duty of it; purpose, in a universe that is ordered rather than random; and responsibility, in knowledge that ends in humility and accountability rather than arrogance. A learner who cannot be wrong has not learned. This was

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New worlds are built from new thoughts, not from bricks and mortar.

the intellectual engine of Islamic civilisation at its height. Ibn al-Haytham insisted that a claim be tested by controlled observation; al-Biruni measured the earth and studied other cultures on their own terms. For learners of every faith the lesson holds: the universe rewards those who observe carefully, question honestly, and answer for what they do with what they find.



WILL YOU NOT REFLECT? / INQUIRY AT THE HEART OF THE CURRICULUM

6.4 Iqbal: from reader of the book to author of it. Where Macaulay sought interpreters, Allama Muhammad Iqbal sought authors. His idea of khudi - self-realisationjoined to moral responsibility - is the natural philosophical foundation for the education of a free nation. Khudi is not self-regard. It is the disciplined self, answerable for its gifts and unwilling to live on borrowed thought.

6.5 The question.

آتی ہے دمِ صبح صدا عرشِ بریں سے

کھویا گیا کس طرح ترا جوہرِ ادراک!

کس طرح ہُوا کُند ترا نشترِ تحقیق

ہوتے نہیں کیوں تجھ سے ستاروں کے جگر چاک

تُو ظاہر و باطن کی خلافت کا سزاوار

کیا شُعلہ بھی ہوتا ہے غلامِ خس و خاشاک

مِہر و مہ و انجم نہیں محکوم ترے کیوں

FROM THE MINUTE / KEY MESSAGE

The learner must move from reading, to questioning, to creating knowledge.

کیوں تیری نگاہوں سے لرزتے نہیں افلاک

“At dawn, a voice descends from the highest heaven: How did you lose your gift of understanding? How did the sharp lancet of your inquiry grow dull? Why can you no longer pierce the hearts of stars? You are worthy of stewardship over the outward and inward worlds; can a flame become a slave to straw and stubble? Why are the sun, the moon and the stars not subject to you? Why do the heavens not tremble beneath your gaze?”

Iqbal asks what has become of a mind that no longer pierces the stars: a powerful spirit subdued by petty concerns. A classroom that produces only calm reproduction fails his test before it fails any board’s. In an age when a machine will gladly do a student’s thinking, that failure has become practical as well as moral.

خدا تجھے کسی طوفاں سے آشنا کر دے

کہ تیرے بحر کی موجوں میں اضطراب نہیں

“May God acquaint you with some storm, for there is no unrest in the waves of your sea.” (Zarb-e-Kaleem, Talib-e-Ilm)

6.6 The distinction. Reading remains essential, but a nation that only reads other nations’ books will remain their dependent. The learner must move from reading, to questioning, to creating knowledge. Iqbal’s couplet to the student of knowledge belongs above the examination hall as much as above the library.

تجھے کتاب سے ممکن نہیں فراغ کہ تو

کتاب خواں ہے مگر صاحبِ کتاب نہیں

“You cannot be free of the book, for you are a reader of books, but not the author of the book.” (Zarb-e-Kaleem, Talib-e-Ilm)

6.7 The method. New worlds are built from new thoughts, not from bricks and mortar. Buildings, devices and laboratories matter, but their value lies in the intellectual life inside them. A laboratory in which a child copies a result already on the board, or a tablet on which the child copies a result already on the screen, changes nothing that matters.

جہانِ تازہ کی افکارِ تازہ سے ہے نمود

FROM THE MINUTE / KEY MESSAGE

Iqbal’s couplet to the student of knowledge belongs above the examination hall as much as above the library.

کہ سنگ و خشت سے ہوتے نہیں جہاں پیدا

“A new world shows itself through new ideas; worlds are not born of stone and brick.” (Zarb-e-Kaleem, Takhleeq)

6.8 The spirit. The Shaheen is Iqbal’s image of high aim, self-respect, resilience and independent action. These qualities are not produced by a motto on a wall. They grow through hard tasks, real responsibility and the freedom to fail and begin again — for girls and for boys, without a different ceiling.

نہیں تیرا نشیمن قصرِ سلطانی کے گنبد پر

تو شاہیں ہے، بسیرا کر پہاڑوں کی چٹانوں میں

“Your nest is not on the dome of a sultan’s palace. You are a falcon; make your home on the mountain crags.” (Bal-e-Jibril)

تو شاہیں ہے، پرواز ہے کام تیرا

ترے سامنے آسماں اور بھی ہیں

“You are a falcon; soaring is your calling. Ahead of you lie yet more skies.” (Bal-e-Jibril)

Neither present achievement nor temporary setback marks the limit of what a young Pakistani can reach. There are always greater heights of knowledge, discovery and service ahead.

6.9 The synthesis. In The Reconstruction of Religious Thought in Islam, Iqbal brought the Islamic intellectual tradition into confident conversation with modern science and philosophy. [2] That is the model for this reform: faith and reason, heritage and modernity, held together rather than set against each other. A curriculum that forces a child to choose between the mosque and the laboratory has misunderstood both.

FROM THE MINUTE / KEY MESSAGE

From its opening, the Quran treats knowledge as active engagement with the signs of Allah, in revelation and in the natural world.

7. The learner we seek



THE LEARNER WE SEEK

"The confidence to belong, the freedom to inquire, and the ability to create value."

7.1 A philosophy proves itself in the person it forms. Education 2.0 should be judged by what kind of young Pakistani it produces. At the end of school, every learner should have grown in knowledge, skill, character and citizenship along the six lines below. These are not slogans for a wall. They are outcomes to be written into subjects and recognised in assessment. A quality the examination does not reward will not be taught.

The learner as…	Who they are	Qualities they carry	Skills they can demonstrate
A confident Pakistani	Knows and takes pride in the nation's faith, heritage, languages and history; engages the world as an equal, neither defensive nor imitative	Self-respect (khudi), dignity, sense of belonging, cultural confidence, openness to other civilisations	Fluent communication in a home language, Urdu and English, and where offered a further world language; explaining Pakistan's history and heritage with evidence; representing the country's perspective in debate
An independent thinker	Observes, questions and reasons from evidence; moves from reading knowledge to creating it	Curiosity, intellectual courage, open-mindedness, humility before evidence, love of learning	Critical thinking; scientific inquiry (observe, hypothesise, test, conclude); analysing data and sources; verifying claims and detecting misinformation and manipulated media; original writing and research
A capable contributor	Applies knowledge to real problems and keeps learning throughout life	Diligence, perseverance, adaptability, pursuit of excellence, resilience after failure	Reading with comprehension; numeracy and applied mathematics; coding and digital literacy; directing and checking AI tools responsibly; problem-solving; planning and managing projects

FROM THE MINUTE / KEY MESSAGE

A school that decides everything for its students will graduate adults who wait to be told.

The learner as…	Who they are	Qualities they carry	Skills they can demonstrate
A person of character	Treats knowledge as a trust to be used for good	Honesty, integrity, self-discipline, compassion, gratitude, accountability, fairness	Ethical reasoning; honest self-evaluation and self-correction; managing emotions and wellbeing; making responsible choices without supervision; resolving conflict peacefully
A responsible citizen	Understands the Constitution, fulfils civic duties and respects the rights of others	Respect for law, tolerance, empathy across faiths and regions, public spirit, environmental care	Explaining rights, duties and how government works; lawful participation; respectful dialogue and disagreement; responsible sharing of information; community service; climate and disaster preparedness
A creator of value	Builds livelihoods, institutions and ideas for Pakistan and for humanity	Initiative, enterprise, leadership, teamwork, sense of purpose	Collaboration in diverse teams; leadership of group tasks; financial literacy; entrepreneurial thinking (identifying needs, costing, quality); innovation and design

7.2 The curriculum should also say what a child can do at each stage, in terms a teacher and a parent can check.

Stage	By the end of this stage, every learner should be able to…
Early years (age 3–5)	Speak confidently in their home language, recognise letters and numbers, ask questions, play and work with others.
Primary (Classes 1–5)	Read with comprehension in Urdu or the mother language and begin reading in English, use the four operations fluently, observe and record simple experiments, tell fact from opinion, and use patterns and sequences (the roots of coding).
Middle (Classes 6–8)	Write a clear argument, use fractions, ratio and basic algebra, design a simple investigation, write basic code, check a source, explain in simple terms how an AI tool produces an answer and why it can be wrong, explain how local and provincial government work, and begin a further world language where offered.
Secondary (Classes 9–12)	Analyse evidence and data, apply mathematics and science to real problems, use digital and AI tools responsibly and show their work with and without them, verify claims and recognisemanipulated media, understand the Constitution and civic duties, manage personal finances, and complete an independent project.

7.3 Such a learner is an agent, not a passive recipient of a better syllabus. Learner agency, the capacity to set a goal, act on it and answer for the result sits at the centre of modern curriculum

FROM THE MINUTE / KEY MESSAGE

At the end of school, every learner should have grown in knowledge, skill, character and citizenship along the six lines below.

frameworks. [7] Students should have real choices of projects, electives and pathways, and a voice in school life through councils that decide real matters. A school that decides everything for its students will graduate adults who wait to be told.

8. Ten tests for every curriculum decision

TEN TESTS / ONE PURPOSE

Knowledge | Character | Inquiry | Equity

8.1 Principles that cannot decide a case are decorations. The reform may adopt the following as tests. A proposal that fails them should be redesigned, not merely rewritten in warmer language.

1. Knowledge, understood. Every subject should build a sequenced core of knowledge that students remember and can explain, apply and reason with. The target is memorisation without understanding, not memory.

2. Foundations first; less, but deeper. No child should leave primary school unable to read with comprehension and to work with number. A subject should teach fewer things well rather than many things badly.

3. Rooted and global. The learner should take an informed pride in Pakistan's heritage, and master the world's knowledge. Neither is a substitute for the other.

4. Concepts in a language the child understands. Early learning should be in Urdu or the mother tongue, with English taught well as a subject from primary school.

5. Inquiry and creation. From the earliest grades, students should observe, question, investigate and make.

6. Character with competence. Ethics, integrity and civic duty should be developed beside knowledge and skill, not in a period that nobody examines.

7. Future-ready and human-centred. Learners should master the tools of Industry 4.0 and the judgment Industry 5.0 demands. Where a machine can do a task, the curriculum should teach the student to direct it, check it and surpass it, not to compete with it at reproduction. A tool without a judgment is a hazard.

8. Equal dignity. Every child girl or boy, rich or poor, of any faith, province or ability should belong in the classroom and be stretched by it.

9. One system, aligned. Curriculum, teacher preparation, textbooks and examinations should change together, or the change will be nominal.

FROM THE MINUTE / KEY MESSAGE

Principles that cannot decide a case are decorations.

10. Evidence, then scale. A new approach should be piloted in representative districts, measured and corrected before it is imposed on a nation. We have paid enough for reforms that were national on day one and unevaluated on day two.

PART THREE FROM VISION TO PRACTICE

9. Six strategic shifts

THREE HORIZONS / FOUNDATIONS SCALE FRONTIER

2027–2030 | 2030–2035 | 2035–2047

9.1 Forming that learner requires the education system itself to change direction. Strategy is the choice of what to do first, what to do at scale, and what to stop. A curriculum reform that tries to do everything at once will do nothing well, and Pakistan has neither the money nor the time for that. This Minute proposes six shifts, in order of priority, each answering a specific failure of Education 1.0. The curriculum strands and institutional changes that follow give them practical shape.

Shift	From (1.0)	To (2.0), and why first
1. From coverage to foundations	A crowded syllabus that most children cannot read	Every child reading with understanding and working with number by the end of primary. Nothing else in this Minute is possible for a child who cannot read.
2. From recall to reasoning	An examination that pays for memory	A phased reform of board examinations to reward comprehension, application and practical work. The paper is the lever that moves every other part of the system.
3. From language as filter to language as bridge	Concepts taught in a language the child does not yet think in	Understanding in Urdu or the mother language; English taught well as a subject; world languages as added powers.
4. From technology as hardware to technology as capability	Devices bought; teaching unchanged	AI and digital tools used as tutor and teacher's assistant under human judgment; AI literacy for every child; Urdu-language AI resources built at home.
5. From two nations to one standard	Parallel streams, divided by income	Common national learning outcomes for every stream, and national qualifications of international standing.

FROM THE MINUTE / KEY MESSAGE

Strategy is the choice of what to do first, what to do at scale, and what to stop.

Shift	From (1.0)	To (2.0), and why first
6. From announcement to evidence	National launches, inputs counted, outcomes unmeasured	Pilot, measure, correct, then scale; publish annually what children can do.

9.2 What Education 2.0 should stop doing. A strategy that names no cessations is a wish list. The reform should stop:

• revising textbooks without revising the examination that decides how they are taught;

• buying devices, laptops and smart boards ahead of a plan for how teaching will change and how learning will be measured;

• launching national programmes without a pilot, and judging them by the number of schools reached rather than what children learned;

• treating English vocabulary as evidence of understanding in subjects other than English;

• training teachers through one-off workshops and counting attendance as impact; and

• adding new subjects to a timetable that cannot yet deliver the foundations.

9.3 Sequencing across three horizons. The child who enters Class 1 in 2027 sets the clock.

• Horizon 1, 2027–2030 foundations and alignment: a national push on foundational literacy and numeracy; the learner outcomes and ten tests adopted; the alignment matrix prepared; examination reform announced with sample papers; inquiry, language and AI-tutoring pilots in representative districts.

• Horizon 2, 2030–2035 scale what works: reformed examinations take effect for cohorts given notice; pilots that have proved themselves scale across provinces; teacher education fully revised; Urdu scientific terminology and bilingual materials in use.

• Horizon 3, 2035–2047 frontier and standing: national qualifications of international standing; advanced pathways in science, technology and vocational fields; Pakistani institutions producing, not only using, educational technology and AI in our languages.

9.4 Other nations confirm the logic, and Pakistan should learn from all of them while copying none. Finland pairs a national core curriculum with local adaptation; [4] Singapore builds character and competence together; [5] Germany's dual system ties technical education to employers. [6] Several of these systems were poor when they made their choices. The common thread is not wealth but clarity of purpose, respect for the teacher, and alignment between what is taught, how it is taught and what is examined.

FROM THE MINUTE / KEY MESSAGE

A curriculum reform that tries to do everything at once will do nothing well, and Pakistan has neither the money nor the time for that.

10. What children should learn

EIGHT STRANDS / LEARNING THROUGH SUBJECTS

Core knowledge | Practice | Real problems

10.1 These shifts must be reflected in what children actually learn. Content should be organised into eight strands that run through the subjects rather than sit beside them; a strand with no periods, no teacher and no marks does not exist. Every school year should also include at least one extended project that joins several subjects around a real problem water, a local industry, a public health question. Nothing new should be added to a timetable that cannot yet deliver the foundations. Every revised curriculum should carry a budget of instructional hours by stage, a clear line between a compulsory core and optional depth, and a rule that no topic enters unless another leaves. [27] A syllabus that cannot be taught in the year has not been designed. It has been accumulated.

Strand 1 Foundational literacy and numeracy

10.2 Every later ambition rests on reading, writing, speaking and number sense. Clear progressions, structured teacher guides, regular low-stakes checks and catch-up support should bring each child to the standard of the grade, and teaching at the right level grouping children by what they can actually do, not by the grade printed on the register should be standard practice in the early years. The foundations begin before Class 1: every child should have at least one year of quality, play-based pre-primary education with trained teachers.

Strand 2 Skills for this century

10.3 Critical thinking, creativity, inquiry, collaboration and communication [9] should be built through subjects and practice, not taught as labels. Debate, student councils, science fairs, sport and the arts extend the same learning, and must be open to every child, regardless of gender, disability or income. Creativity should be assessed as well as encouraged: international assessments now measure it, [29] and our examinations should reward original ideas, well developed, as they reward correct answers.

FROM THE MINUTE / KEY MESSAGE

A syllabus that cannot be taught in the year has not been designed. It has been accumulated.

Strand 3 Science, mathematics and technology

10.4 The curriculum should build a progression a teacher can follow: patterns, sequencing and logic in the primary years; algorithms, coding, data and simple design in the middle years; statistics, experimental method and introductory AI through real applications at secondary level; and, on advanced and vocational routes, robotics, electronics, cybersecurity and automated production. Frontier fields biotechnology, semiconductors, quantum technologies, space science should appear as contexts that raise the aim, with specialist depth reserved for advanced pathways.

Strand 4 Human judgment in the age of AI

10.5 Industry 5.0 places human wellbeing, sustainability and resilience at the centre of technology. [3] Students should ask, as a normal part of any technical subject, how a technology affects workers, communities and the environment. AI literacy should cover what models can and cannot do, how they are trained and on whose data, bias, invented answers, privacy and honest attribution, in line with UNESCO's 2024 AI competency frameworks. [26] Students should treat AI as a sparring partner rather than an oracle, and be able to show their understanding both with and without it.

Strand 5 Heritage, identity and cohesion

10.6 History and social studies should introduce the Indus Valley, Gandhara, the Islamic intellectual tradition and the cultural histories of every province and territory, alongside the Pakistan Movement, Iqbal's thought and the Quaid-e-Azam's constitutional leadership. The national story should include women, minorities, scientists, entrepreneurs, farmers, workers, sportspeople and artists, not only soldiers and politicians. The study of Muslim Spain, Central Asia, the Ottoman world and the Mughal subcontinent should ask what allowed these societies to flourish and why they declined. A recurring answer is that they flourished while they produced knowledge. The useful question about Cordoba is not how beautiful it was, but what a society must do, in its schools and libraries, to be capable of such a thing again. Heritage should also open onto other cultures and faiths, studied on their own terms.

10.7 Textbooks should distinguish evidence from interpretation. Independent review should remove factual error, fabricated quotation, stereotype and collective blame, and primary sources, maps, oral histories and local museums should show students how history is made. A nation that invents its quotations will eventually be unable to trust its own books.

FROM THE MINUTE / KEY MESSAGE

Content should be organised into eight strands that run through the subjects rather than sit beside them; a strand with no periods, no teacher and no marks does not exist.

Strand 6 Civic responsibility and ethics

10.8 Civic education should explain the Constitution, the roles of federal, provincial and local government, public finance, taxation, voting and due process, and the link between rights and duties, within the global norms of education for peace and human rights. [8] A republic is practised in small places: honesty in a transaction, respect for a queue and for lawful procedure, care of public property, the peaceful settlement of a dispute — online as well as off. Grand principles that do not survive a bus stop have not been learned.

10.9 Islamic education for Muslim learners should join knowledge to conduct and service, with a focus on ethical character and social harmony. Under Article 22, other learners should receive religious or ethics education consistent with constitutional protection. Every child should experience dignity and belonging. Civic assessment should test knowledge and judgment, never political allegiance.

Strand 7 Enterprise, climate and wellbeing

10.10 URAAN Pakistan's five Es — Exports, E-Pakistan, Environment, Energy and Equity — offer real contexts for learning. [11] Students should see how knowledge creates value on a farm, in a workshop, in a firm and in a public service; an export is a lesson in quality and in keeping a promise to a stranger. Financial literacy, enterprise projects that need no capital from the family, and career guidance that gives technical routes equal respect belong in this strand. Sodo environmental learning and practical preparedness for heat and flood, health and physical education, protected time for the arts and sport, and social and emotional learning, [30] with counselling or referral for children in distress. A child who is anxious, bullied or grieving will not learn, however good the syllabus.

Strand 8 Media and information literacy

10.11 A child today meets more claims in a day than a grandparent met in a year, most of them arriving on a phone, unsigned and designed to provoke. We saw in the Pakistan–India conflict of May 2025 how quickly fabricated claims can travel, and we have seen rumour incite a mob. I have known its cost at first hand: in 2018 a campaign built on false claims ended in an attempt on my life. A citizen who cannot verify is not free. Such a citizen belongs to whoever writes the most persuasive forward.

10.12 Our own tradition gave the world one of its most rigorous methods of source criticism. The Quran commands it:

يَا أَيُّهَا الَّذِينَ آمَنُوا إِن جَاءَكُمْ فَاسِقٌ بِنَبَإٍ فَتَبَيَّنُوا أَن تُصِيبُوا قَوْمًا بِجَهَالَةٍ فَتُصْبِحُوا عَلَىٰ مَا فَعَلْتُمْ نَادِمِينَ

“O you who believe, if a person of bad character brings you news, verify it, lest you harm a people in ignorance and then regret what you have done.” (Al-Hujurat 49:6) [12]

FROM THE MINUTE / KEY MESSAGE

Nothing new should be added to a timetable that cannot yet deliver the foundations.

10.13 The Prophet (peace be upon him) warned that it is enough of a lie for a person to pass on everything he hears, and the scholars of hadith built on this the discipline of isnad, tracing every report to its source and weighing the reliability of each narrator. “Who said it, how do they know, and who passed it on?” is our inheritance, and it applies with equal force to the answer of a machine. Media literacy should run through every stage: telling fact from opinion in primary school; checking sources and recognising edited images and manipulation in middle school; verifying claims, detecting AI-generated content and understanding algorithms and coordinated campaigns at secondary level. It should live inside subjects a science lesson testing a viral health claim, a history lesson dismantling a forged quotation and board examinations should include unseen, real-world claims to evaluate. A generation trained to pause before it forwards will protect the republic more cheaply than any regulator.

11. Language: understanding before fluency



UNDERSTANDING BEFORE FLUENCY

“A child cannot grasp a concept taught in a language they do not yet think in.”

11.1 Language is the most consequential question in this reform, and the one most often avoided because it is socially costly. A child cannot grasp a concept taught in a language they do not yet think in. When mathematics, science and social studies are taught in English from Class 1, most children do the only thing left to them: they memorise words they cannot explain. Rote learning then is neither the teacher’s failure nor the child’s. The medium of instruction has required it.

11.2 The World Bank’s review Loud and Clear finds that children learn to read and reason faster in a language they already speak, and then learn further languages more successfully. [13] The nations we wish to resemble acted on this. Japan, the Republic of Korea, China and Vietnam built world-class scientific capacity while teaching in their national languages and teaching English seriously as a subject. Malaysia moved mathematics and science to English in 2003 and reversed course from 2012 after learning suffered, especially in rural schools. Our own experience points the same way. Pakistan’s educated class often speaks better English than its East Asian counterparts, yet English fluency has delivered access for a small elite rather than development

FROM THE MINUTE / KEY MESSAGE

A child cannot grasp a concept taught in a language they do not yet think in.

for the many. This is the Macaulay inheritance at its most durable: a language turned from a tool into a filter.

11.3 We also have a precedent of our own. Osmania University in Hyderabad Deccan once taught medicine, engineering and the sciences through Urdu, building a scientific vocabulary to do so. Article 251 of the Constitution makes Urdu the national language, and the Supreme Court in 2015 directed its implementation. A curriculum that cannot say photosynthesis in the national language is not neutral; it quietly sets Article 251 aside in the one place a child would notice.

A phased language pathway

11.4 The policy direction should be phased, with provinces free to decide the place of regional languages within it:

• Primary, Classes 1 to 5: concepts taught in a language the child understands Urdu, or the mother language where the province so decides with Urdu literacy firmly established.

• English as a subject from primary school: taught well, through speaking, listening, stories and reading, by qualified teachers with materials worthy of the aim, so that children acquire English as a skill rather than memorise other subjects through it.

• A planned transition: to bilingual or English instruction in selected subjects at middle or secondary level, supported by bilingual textbooks and glossaries, so that no concept is lost in the crossing.

• Examinations that test understanding rather than English vocabulary: a student taught in Urdu should be able to show what they know in Urdu. An examination in a language the child cannot think in is an examination of the language, falsely reported as one of the subject.

11.5 Urdu should become a full language of science, and of artificial intelligence. A national effort, led by the National Language Promotion Department with the universities, the Higher Education Commission and the Ministry of IT and Telecommunication, should harmonise scientific and technical terminology, produce bilingual textbooks and glossaries of real quality, translate key modern works with AI assistance under scholarly review, and build open Urdu and regional-language datasets so that the AI tools our children use understand their languages. In the age of AI, terminology is the condition of not being left out of the machines.

11.6 This is not a Minute against English. English remains essential for higher education, research, trade and global engagement, and Pakistani students should master it. The issue is sequence: understanding first, in a familiar language; English then, as a second power. A child who has understood mathematics in Urdu will learn its English terms quickly. A child who has memorised only the English terms has learned neither the mathematics nor the English.

11.7 Pakistan's linguistic diversity is also a strength. Sindhi, Pashto, Punjabi, Balochi, Saraiki, Brahui, Hindko and our other languages carry centuries of literature and the first words of most of

FROM THE MINUTE / KEY MESSAGE

Rote learning then is neither the teacher's failure nor the child's.

our children, and Article 251(3) allows each province to provide for the teaching of its language alongside the national language. The principle holds everywhere. Regional and mother languages carry understanding and identity. Urdu binds the nation. English opens the world. A policy that sacrifices any one of the three will fail in some province, for some reason.

Further languages, wider horizons

11.8 A nation that means to trade, study and work across a multipolar world needs further windows onto it. Once understanding is secure not in Class 1 the reform should offer major world languages as electives: Arabic, for the Quran and the classical Islamic sciences and as the working language of the Gulf, where millions of Pakistanis earn their living; Chinese, the language of our largest trading partner and of CPEC; Persian, the language of much of Iqbal's finest work and of our western neighbourhood; French and Russian for Europe, Africa and Central Asia; and Japanese and Korean for skilled-employment routes, with certification to international standards such as the CEFR or HSK. Islamic civilisation rose in part through translation: the scholars of the Bait-ul-Hikmah in Abbasid Baghdad rendered Greek, Persian and Sanskrit learning into Arabic, and then surpassed it. Mastering other nations' languages in the service of one's own purpose is the opposite of Macaulay's design. We want a generation that can bring the world's knowledge home, and take Pakistan's case to the world.

12. Examinations, assessment and the examiner within



WHAT THE PAPER REWARDS

"Examinations send the strongest signal in the system."

12.1 Examinations send the strongest signal in the system. Board examinations should, progressively and with notice, give greater weight to comprehension, application, analysis and practical work, alongside the recall that some knowledge still requires. Reforms should be announced well in advance, with sample papers and marking schemes, so that no cohort already preparing is taken by surprise. A sudden change to the paper would be unjust, and would be resisted even by those who share its aim.

FROM THE MINUTE / KEY MESSAGE

Examinations send the strongest signal in the system.

12.2 Projects, portfolios, laboratory work and oral explanation reveal abilities that a written paper misses. In an age of AIthey must make the student's own reasoning visible work done in class, drafts kept, and a short oral defence and they should be piloted for reliability and fairness. Results should return to teachers and curriculum bodies as information, not only as league tables. University and professional entry tests should be aligned with the reformed board examinations, and vocational pathways connected to the National Vocational Qualifications Framework, so that every route leads onward rather than to a dead end.

The examiner within

12.3 Every examination described so far is conducted by someone else. Life is not. The decisions that shape a young person whom to trust online, whether to copy, whether to let a machine do their thinking, whether to forward a rumour, which path to take after school are increasingly made on a phone, out of sight of any parent or teacher. External evaluation measures what a student has learned. Self-evaluation decides what the student will do when nobody is measuring.

12.4 Our tradition names this faculty precisely. The Quran speaks of al-nafs al-lawwama, the self that reproaches itself (Al-Qiyamah 75:2). Muhasaba honest self-accounting is the moral form of what modern research calls metacognition and self-regulation, among the most effective and least costly ways to raise learning. [16] Self-evaluation should be taught and practised across the school years. In primary school, children check their own work against a simple model; in middle school, they assess it against the teacher's rubric and explain the gap; at secondary level, they keep a portfolio with a written self-evaluation. Self-assessment should not by itself award marks; what deserves recognition is the accuracy of a student's judgment of their own work. Teachers should model it, and report cards should carry a section in the student's own words: what I did well, what I did not, and what I will do next. A school that teaches children to examine themselves sends into the world adults who need no inspector to be honest.

12.5 Parents are the strongest force on what schools are asked to do, and many have been taught by the tuition economy that memorisation is the safe route. They should be told plainly, in Urdu and regional languages, why the examination is changing; shown, through report cards that describe learning rather than only rank it, what their child can now do; and given a real role through school management committees. A reform that parents do not understand will be undone at the tuition centre.

FROM THE MINUTE / KEY MESSAGE

Board examinations should, progressively and with notice, give greater weight to comprehension, application, analysis and practical work, alongside the recall that some knowledge still requires.

13. Technology in the service of learning



TECHNOLOGY WITH PURPOSE

“A machine may draft. It may not certify.”

13.1 The rule for technology in schools should be a burden of proof: a screen is used where it brings a clear benefit to learning that paper, talk and practice cannot, and not otherwise. Some of the world’s most selective schools are returning to pen and paper for routine learning, keeping computers where they bring real benefit. [25] The curriculum should protect sustained reading, handwriting, calculation and classroom dialogue, especially in the early years.

13.2 Within that rule, AI can serve as a patient tutor for the child and an assistant for the teacher preparing materials in Urdu and regional languages, generating practice at the right level, and reducing the paperwork that keeps teachers from teaching. It should be introduced through pilots, with teachers involved in the design, and judged by what children learn. The Republic of Korea, which introduced AI textbooks nationally in 2025 and reclassified them as supplementary material within the year, shows the cost of mandating first and testing later. [23] Schools need age-appropriate rules for use and disclosure, and children’s data needs clear national protection. The teacher remains responsible for instruction and for assessment. A machine may draft. It may not certify.

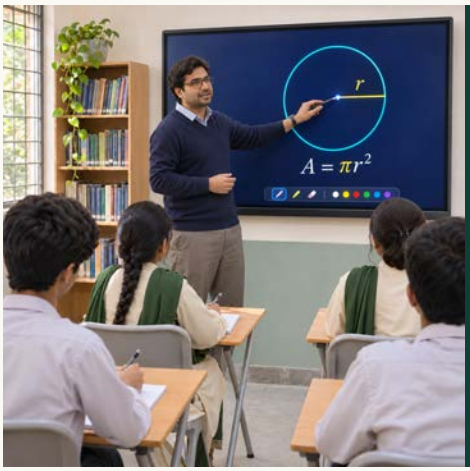
13.3 The digital divide is the new language divide. In Education 1.0, English sorted children by the income of their parents; in 2.0, connectivity and devices could do the same, and faster. Every digital initiative should be designed first for the child with the least: school connectivity before personal devices, shared and offline-capable equipment, content that works on a basic phone and over radio and television, and deliberate measures to close the gap between girls and boys. It would be a perverse outcome if elite schools gave their children teachers, books and conversation while public schools received tablets in place of teachers they were never given. Technology should add to good teaching, never substitute for it.

13.4 Build, not only buy. Pakistan should also build, not only buy. Urdu and regional-language datasets, open learning resources, and educational applications made by Pakistani institutions are how we avoid Minute 1.0 pitfalls and make technology an instrument of our own purpose.

FROM THE MINUTE / KEY MESSAGE

Technology should add to good teaching, never substitute for it.

14. Teachers: the carriers of the reform



THE TEACHER AS DESIGNER

“No education system rises above its teachers.”

14.1 No education system rises above its teachers. In Education 1.0 the teacher was the source of knowledge; in 2.0 the teacher is the designer of learning and the guardian of judgment, a role that technology makes more important, not less. A teacher is not a transmitter to be replaced by a screen, but the professional who turns information into understanding. For every significant curriculum change, the reform should name, in the same decision, the teacher competence it requires, the materials it needs and the way it will be assessed. If students are to learn scientific inquiry, teachers must be prepared to run a safe investigation, and the examination must reward experimental reasoning. Anything less is an announcement.

14.2 Practising teachers should help design the curriculum. Initial teacher education, led by the Higher Education Commission and the provincial institutes, should be revised in step with it: to teach in Urdu and mother languages, to teach English well, to teach media literacy across subjects, and to use AI with confidence and caution. Continuing development should rely on coaching, demonstration lessons and peer observation rather than the one-off workshop, which changes a register and rarely a practice, and heads should be trained as instructional leaders. Teaching must also be a profession worth staying in: recruitment on merit, a career ladder that rewards expert teachers who remain in the classroom, relief from administrative burdens, and support, through public–private partnership, for teachers in low-fee private schools whom the state has never reached. A teacher asked to teach by a method they were never prepared for will return to the textbook, and should not be blamed for the return.

14.3 State-funded textbooks, teacher guides and digital resources should be openly licensed and available in print, offline and online. Open, high-quality national materials are the surest way to shrink the guide-book market that grows around a weak textbook and a predictable paper.

FROM THE MINUTE / KEY MESSAGE

No education system rises above its teachers.

15. One standard for every child

ONE STANDARD / EVERY CHILD

Access | Safety | Inclusion | Learning

15.1 A curriculum for a free nation must work for every child: in a rural or remote school, in a low-income community, among displaced families. A syllabus that assumes a device, a laboratory and a parent who can tutor has already chosen its graduates.

15.2 Every school stream public, private, madrasa or international, including Cambridge and IB should meet common national learning outcomes, and Pakistan should develop national qualifications of international standing. Girls should have equal access to science, technology, sport and leadership. Children with disabilities need accessible materials and reasonable accommodations in teaching and examination, and curricula should follow the principles of universal design for learning. [31] Out-of-school and over-age learners need accelerated routes to a recognised outcome, and gifted children need to be stretched rather than held to the pace of the register.

15.3 Learning also depends on what surrounds the classroom. The reform should be joined to measures on enrolment, nutrition, sanitation and transport, particularly in the districts identified as most deprived under URAAN Pakistan; a hungry child will defeat any curriculum we write. And no child learns in fear. Corporal punishment should end in every school public, private and religious with clear policies and safe reporting routes for bullying, harassment and abuse, online and offline. Safe travel and separate sanitation matter especially for girls. A school that is not safe empties first of the children who most need it.

PART FOUR CARRYING IT FORWARD

16. Carrying it together: coordination, financing and evidence

A WORKING COMPACT / DELIVERY WITHIN THE CONSTITUTION

Agree direction | Cost & pilot | Evaluate & scale

16.1 A reform of this reach cannot be carried by any one government. Under the Eighteenth Amendment the provinces own the classroom: curriculum, textbooks, teachers, schools and the choice of regional languages. Together with the federation, through the National Curriculum

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Unity of purpose does not require uniformity of method.

Council, they set the common national floor. What is needed is not a new authority but a working compact, built on existing institutions and clear about who decides, who delivers, who pays and who reports.

16.2 A compact, not a command. The Inter-Provincial Education Ministers' Conference is the natural forum to adopt an Education 2.0 compact: common national outcomes, the ten tests and six shifts as reference points, and a shared timetable for foundational learning and examination reform, reviewed each year province by province. Between its meetings, a standing committee of the federal and provincial education secretaries, with the National Curriculum Council, the Pakistan Institute of Education and the Ministry of Planning, would meet each quarter, served by the Ministry of Federal Education and Professional Training. Each province would set its own delivery plan, with targets reaching down to the district, and every action would have a single lead. A task with many owners has none.

16.3 Who pays. Most of the cost of schooling is recurrent and provincial, and should remain so. Federal development funds are best used where one investment serves every province: the national learning assessment, Urdu terminology and datasets, open learning materials, pilots and their evaluation, and catalytic support to the districts furthest behind. Provincial development programmes should protect lines for foundational learning, teacher coaching and examination reform, and development partners should be invited to finance the compact rather than run parallel projects beside it. The reform should be fully costed before the next PSDP and ADP cycles, with a published path toward the 4 percent benchmark. A reform that is not in the development budget is a speech.

16.4 Who answers. Accountability should rest on what children learn, not on what was announced. An annual report on the state of learning, prepared by the Pakistan Institute of Education with the provinces, should present results by province and district, and could be laid before Parliament and the provincial assemblies. Where a province or district falls behind, the first response should be support, and the second scrutiny. Pakistan should also take part regularly in TIMSS and PIRLS and, when the system is ready, PISA, and publish the results in full. A nation that intends to compete with the world should be willing to be measured against it.

From agreement to classroom delivery

16.5 The annex states what needs to be done. Delivery also requires an agreed sequence, with each government acting within its mandate. An initial path for consideration is:

- Agree the direction (first 3–6 months): use the inter-provincial forum to consider the ten tests, six shifts and common learning outcomes; identify the responsible institution and lead for each agreed action.

- Establish baselines and costs (within 6–12 months): assess learning and teacher readiness, align examination plans, and prepare fully costed provincial priorities ahead of PSDP and ADP decisions.

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A reform of this reach cannot be carried by any one government.

• Pilot before scaling (2027–2028): test the language, inquiry, teacher-support and AI approaches in representative districts; prepare teachers and sample examination tasks before changing requirements.

• Review and expand (2028–2030): commission independent evaluations, scale approaches that demonstrate results and revise those that do not; give examination cohorts adequate notice.

• Report and course-correct (annually): review learning, equity, financing and delivery risks jointly, with transparent reporting to provincial and national stakeholders.

16.6 The following indicators are offered to the responsible bodies, which should set the targets.

Indicator	Where we stand	Indicative ambition
Learning poverty (late primary)	80 percent, pre-pandemic [15]	Halved by 2035; on a path to the regional best by 2047
Children reading with comprehension by Class 3	Not yet measured nationally on a common scale	A common national measure from 2028; steady annual improvement
Out-of-school children aged 5–16	25.37 million, about 36 percent (Census 2023) [10]	A sustained fall in both number and share every year
Share of board examination marks for reasoning, application and practical work	Low; recall dominates	A majority by the end of Horizon 2
Teachers receiving regular in-school coaching	Limited and uneven	Every primary teacher by 2035
Girls' participation in science, technology and digital skills	Below that of boys	Parity in participation and outcomes
Public spending on education	Below 2 percent of GDP [20]	A published path toward the 4 percent benchmark [21]
Participation in international assessments	Occasional; no regular cycle	TIMSS and PIRLS, and later PISA, on every cycle from Horizon 1
Children with a year of pre-primary education	Far from universal	Universal by 2035

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The reform should be fully costed before the next PSDP and ADP cycles, with a published path toward the 4 percent benchmark.

Indicator	Where we stand	Indicative ambition
Students who report feeling safe at school	Not measured nationally	Measured annually; rising every year

16.7 The principal risks are already visible: Education 1.0 delivered with devices; an examination that does not move; teachers asked for more than they were prepared for; parents reading mother-language instruction as a loss of English; influential families opting out of the national system; new content added without old content removed; and a reform announced but never financed. Each is answered by a safeguard set out in this Minute, and each should be watched by the standing committee.

16.8 Within the Constitution. Nothing in this framework moves a provincial function to the federation. The common floor is set together; everything above it belongs to the provinces, which may go further and faster than the floor requires. The federation's part is to convene, to measure, to finance what only it can finance, and to keep the long plan in view. Unity of purpose does not require uniformity of method.

16.9 The actions annexed to this Minute are offered on that basis. Their timings are indicative, and the responsible bodies should set them. A Minute that annexes a command to a province has misunderstood the Constitution; a Minute that annexes no action has misunderstood the hour. Guidance on digital content and AI should be reviewed on a fixed cycle, while the foundations in language, mathematics, science and civic learning are kept stable. The art of Education 2.0 is to keep the foundations still and the frontier moving. The Ministry of Planning, Development and Special Initiatives stands ready to support the Ministry and provinces on full costing, alignment with URAAN Pakistan and the Public Sector Development Programme, and a monitoring framework that reports what children can do.

17. Concluding observations

17.1 Macaulay's Minute succeeded because it knew what kind of person it wished to produce, and because the examinations, the language and the schools were then aligned to that person. Ours must be equally clear, and equally aligned. We seek Pakistanis in faith and heritage, and Pakistani also in taste, in judgment, in morals and in intellect: masters of the world's knowledge, and makers of their own. Interpreters were useful to an empire. Authors are necessary to a free nation.

17.2 The world has now settled the argument that independence opened. Education 1.0 was always wrong for a sovereign people. It is now also obsolete, because the machine has become the interpreter, knowledge has become abundant, and the future will belong to those who can judge, verify and create. We can no longer afford a system that teaches children to do what a machine does better, and fails to teach them what only a human being can do.

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Interpreters were useful to an empire. Authors are necessary to a free nation.

17.3 Every classroom should give every child the confidence to belong, the knowledge to understand, the freedom to inquire and the capability to contribute. A nation is free when its people can draw strength from their inheritance, meet the world as equals, and author knowledge of their own. Buildings will not do this. Devices will not do this. A paper that rewards memory will not do this. Only a generation taught to observe, to reason, to verify, to belong and to create will do this. That generation is already in our classrooms. The curriculum they meet is the decision.

(Prof. Ahsan Iqbal)

Minister for Planning, Development and Special Initiatives

Annex. Actions for consideration

#	Action	Suggested lead	Indicative timing
A. National direction and curriculum			
1	Adopt the learner outcome statement, the ten tests and the six strategic shifts as reference points for curriculum review	National Curriculum Council with provinces	Within 6 months
2	Set common national learning outcomes in Urdu, Pakistan's history and heritage, and civics and ethics for every school stream, national and international; develop national qualifications of international standing	National Curriculum Council, IBCC, federal and provincial boards	Framework within 12 months
3	Extend common national learning outcomes, including foundational literacy, numeracy and science, to madaris, low-fee private schools and non-formal programmes, building on existing mainstreaming arrangements	National Curriculum Council, MoFEPT and provinces, with madaris boards	Framework within 12 months
4	Conduct a curriculum load audit and publish an instructional-hours budget by stage, with a compulsory core and optional depth	National Curriculum Council with provinces	Within 9 months
5	Specify a knowledge-rich core and learning progressions for each subject	National Curriculum Council and subject panels	Within 12 months
6	Commission independent review of textbooks for accuracy, fabricated quotations and stereotypes	Provincial textbook boards	Rolling, from 2027
7	Publish state-funded textbooks and teacher materials under open licences, in print, offline and online	Provincial textbook boards with MoFEPT	From 2027
B. Foundations, language and inclusion			

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Every classroom should give every child the confidence to belong, the knowledge to understand, the freedom to inquire and the capability to contribute.

#	Action	Suggested lead	Indicative timing
8	Launch a national mission on foundational literacy and numeracy, with a common measure of reading by Class 3	Provinces with MoFEPT and Pakistan Institute of Education	From 2027
9	Provide one year of quality pre-primary education for every child, with a play-based curriculum and trained teachers	Provinces with MoFEPT	Phased from 2027; universal by 2035
10	Adopt a phased language-in-education policy: concepts in Urdu or the mother language at primary, English taught well as a subject from primary school	Provinces with MoFEPT and National Curriculum Council	Within 6 months; pilots from 2027
11	Launch a programme to harmonise Urdu scientific and technical terminology, produce bilingual textbooks and glossaries, and build open Urdu and regional-language datasets	National Language Promotion Department with HEC, universities and MoITT	From 2027
12	Introduce Arabic, Chinese, French, Russian and other world languages as structured options from middle or secondary school	Provinces with MoFEPT, NUML and HEC	Pilots from 2027
13	Integrate media and information literacy across subjects, with unseen-claim tasks in board examinations	National Curriculum Council, provinces, examination boards	From 2027
14	Adopt a national framework on wellbeing, social and emotional learning and safe schools, including child protection and online safety	MoFEPT and provinces	Within 12 months
C. Teachers, examinations and pathways			
15	Prepare an alignment matrix linking each major curriculum change to teacher competence, materials and assessment	MoFEPT, provincial curriculum bodies, examination boards	Within 9 months
16	Revise initial teacher education in step with the new curriculum, including the use of AI tools	HEC and provincial teacher-education institutes	2027–2028
17	Establish a teacher career framework: merit recruitment, career ladders, reduced administrative workload, and support for teachers in low-fee private schools	Provinces with HEC and MoFEPT	2027–2029
18	Publish a phased examination reform plan with sample papers and marking schemes	IBCC and examination boards	At least one year before the first affected cohort
19	Align university and professional entry tests with reformed board examinations, and connect vocational pathways to the National Vocational Qualifications Framework	HEC, IBCC and NAVTTC	Alongside examination reform

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#	Action	Suggested lead	Indicative timing
D. Technology and evidence-based pilots			
20	Develop a national framework for AI in education: AI literacy outcomes, classroom use and disclosure, assessment integrity, child data protection, and pilots of AI tutoring	MoFEPT and National Curriculum Council with MoITT, provinces and PIE	Framework within 12 months; pilots from 2027
21	Pilot inquiry-based science, coding, AI-assisted tutoring and project assessment in representative districts	Provinces with Pakistan Institute of Education	2027–2028; scale on evidence
E. Coordination, financing and accountability			
22	Invite the Inter-Provincial Education Ministers' Conference to adopt an Education 2.0 compact, and agree a standing coordination arrangement and provincial delivery plans with district targets	MoFEPT and provinces, with Ministry of Planning support	For consideration within 6 months
23	Cost the reform fully, including translation, accessibility, coaching, connectivity, equipment and support for disadvantaged schools, and publish a spending trajectory	Ministry of Planning with MoFEPT and provincial finance departments	Before the next PSDP and ADP cycles
24	Establish a joint monitoring framework that reports annually what children can do, by province and district, not only what was spent	MoFEPT, PIE and provinces, with Planning Ministry support	Annual reporting
25	Commit to regular participation in TIMSS and PIRLS, and in PISA when ready, with a national sample assessment on a fixed cycle	MoFEPT and PIE with provinces	Next available cycle
26	Commission an independent evaluation of the reform's implementation, reported publicly	Ministry of Planning with PIE and independent researchers	From 2028

Notes on sources

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2. Iqbal, M., The Reconstruction of Religious Thought in Islam. The verses in paragraphs 6.5 to 6.8 are from Zarb-e-Kaleem ("Talib-e-Ilm" and "Takhleeq"), Bal-e-Jibril and Iqbal's other Urdu poetry. Translations in this Minute are for the reader of English; the Urdu is the text.

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We seek Pakistanis in faith and heritage, and Pakistani also in taste, in judgment, in morals and in intellect: masters of the world's knowledge, and makers of their own.

10. Pakistan Bureau of Statistics, 7th Population and Housing Census 2023: 25.37 million out-of-school children aged 5–16, 35.6 percent of the age group; about 20 million never enrolled. Pakistan Institute of Education, out-of-school children report based on Census 2023: 13.41 million girls and 11.96 million boys; out-of-school rates of about 58 percent in Balochistan, 46 percent in Sindh, 37.5 percent in Khyber Pakhtunkhwa, 27 percent in Punjab and 15 percent in Islamabad Capital Territory.

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16. Education Endowment Foundation, Teaching and Learning Toolkit: metacognition and self-regulation. The Holy Quran, Al-Qiyamah 75:2 and 75:14.

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Illustrations are conceptual. Highlight panels draw on the Minute.

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It is now also obsolete, because the machine has become the interpreter, knowledge has become abundant, and the future will belong to those who can judge, verify and create.