



## Using International Quality Range Assessment (IQRA) as an Online Assessment in The Development of Insan Rabbani

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### Abstract

This change is driven by the accelerating technical and ethnic evolution of our society and the concomitant need for all students to become competent lifelong learners. If assessments are to support improvements in student learning, their results must inform students how to do better the next time. This will require communication of results that transmit sufficient understandable details to guide the learner's actions. In such contexts, to have a productive impact on the learner, the nature of our assessment practices must continue to evolve in specific directions. For instance, the assessment results must go beyond merely providing judgments about student performance to providing rich descriptions of student performance. In other words, if assessments are to support improvements in students learning, their results must inform students how to do better the next time; assessment for learning and not only assessment of learning. This paper seeks to address the above concerns by describing the use of online assessment, in detailing out rich descriptions of student performance as related to the specified educational objectives. We describe this in terms of students' becomingness. It is organised as follow: (a) Human and Development (b) Insan Rabbani as Target of Human Development (c) Education in Human Development (d) Assessment in the Education process to be Insan Rabbani (e) ICT as enabler of IQRA (f) Conclusion.

**Keywords:** Assessment, Online, Becomingness, Insan, Intervention

### 1. Introduction

Within the last couple of decades, the schools as stipulated by the philosophy and goals of education, has adjusted their role as places of human development rather than places where some succeed at learning while others tumble into inevitable failure (Rick Stiggins, 2005). They have become places where all students are expected not only to meet pre-specified and increasingly rigorous academic achievement standards, but at the same time, become good and responsible citizens as stipulated by the goals of education.

### 2. Human and Development

Human knowledge of man's origin is limited in such a way that only through revelation it is truly understood. Without such divine information, humans would never know their origin and would end up within uncertain and speculative presumptions instead, as attempted by modern secular science. The Qur'an emphasizes that man, the best of all God's creation (At-Tin:4) is created with the sole purpose of worshipping Allah (Ad-Zharyat:56). Al-Atas (1990) defines humans as a living being that speaks, signifying his given power to comprehend what knowledge is communicated and to communicate what it comprehends.

The Qur'an refers to human beings as *INSAN*. Adam a.s. is the first insan created and the progenitor of all insan. He is a rational soul endowed with wisdom and a sense of justice, taught knowledge of the nature of all things, given the power of articulated speech, and a body complete with motive and potential powers. He is certainly not a caveman, he is not anthropic, he is not the result of an evolution involving a process of natural selection in biological development from a common ancestor; he is not a genus, nor a species; he is not homo sapiens. (Al-Atas, 1990)

The Qur'an (Al-Baqarah:2) establishes an essential principle of Islam, stating that a system is only worthy of praise and appreciation when it upholds and fulfils the responsibility of universal development for all. That is why the Qur'an states that the Supreme Being, in whose hands lies all sovereignty and authority of the entire universe, is responsible for providing nourishment and provisions for the development of all beings, and it is He who maintains the control and stability *so* worthy of our praise. Allah s.w.t. has established the measures and standards ( *قدر* Qadr) in the words of the Qur'an, in order to accomplish this aim while He maintains full control over all aspects of Qadr. He has the power over all things (Al-Mulk:1).

This is but one kind of development, i.e., physical development. However, human beings are more than just the physical body. There is, in addition, an essential aspect of our humanity which the Quran refers to as our *نفس* 'nafs'. We can call it 'human soul,' 'human self,' 'human personality' or 'human individuality' but, none of these descriptions fully explains the meaning of 'nafs'. Human beings become a part of humanity solely due to their 'nafs'. With respect to the physical body alone, human beings belong to the animal kingdom. But there is something else within each human beings for whose development God's attributes are necessary. One can call these attributes **Permanent Values**. The 'nafs' acquires its capability for development through these core values.

The central assumption in this paper is that development is primarily about safeguarding and enhancing the dignity of human beings. Human dignity originates from God who has singled out human beings from other creations and favoured it in several ways. We are the only creature that contains the Divine spirit which was placed in human beings by God during creation (Al-Hijr:29). God has also distinguished human beings from the rest of HIS creations by endowing us with intellect (*'aql*). Further, God has given human beings the custodianship (*khalifa*) over the rest of HIS creations on earth.

Along with this status, God honoured human beings with an enormous trust of responsibility and service by giving the human beings, a trust as vicegerents (*Khalifa*), or stewards, of creations. Therefore, human beings have close proximity to God as special creations. In fact, the means of developing an ever-closer relationship with God is ultimately what Islam is all about. As revealed in the Qur'an: "And I did not create the jinn and mankind except to worship Me." (Az-Zharyat: :56).

The majority of Muslim academics are of the view that in Islam, the basic goal of development is to create an environment that enables people to enjoy spiritual, moral and socio-economic well-being in this world and success in the Hereafter (they refer to this conception of well-being as *falah*). The implications of these are that such an environment can only be created in societies that aspire to remove sources of human deprivation in multiple dimensions. This is contrary to the prevailing view of development focused on economic growth alone.

### 3. **Insan Rabbani as a goal of Human Development**

Insan Rabbani is the “process of becoming and not the state of being”. The best servant continuously strives to become one. It is a never-ending process and will only terminate upon one’s death.

The word “rabbani” is an Arabic word rooted from the word “rabb” and added the letters “Alif” and letter “Nun” makes its pronunciation as rabbani. The word developed into phrases such as robbi, rabbana, robbuna, rabbani and rubbubiyah and others, referring to God the Most Gracious One. When Islam says it is Rabbani, it means the rights that belong to Allah Almighty. All the legal concept of the principles of values and scales in the religion of Islam stem from Allah SWT. Human beings need to adapt to Islam and immersed it out based on the teachings of the Prophet Muhammad s.a.w. Al-Baidhowi (1968) interprets rabbani as someone who has perfect knowledge. Whereas Al-Alusi (1987) interprets the word rabbani as a person who is; (a) knowledgeable, (b) knowledgeable and wise; (c) knowledgeable and righteous; (d) smart in regulating human affairs.

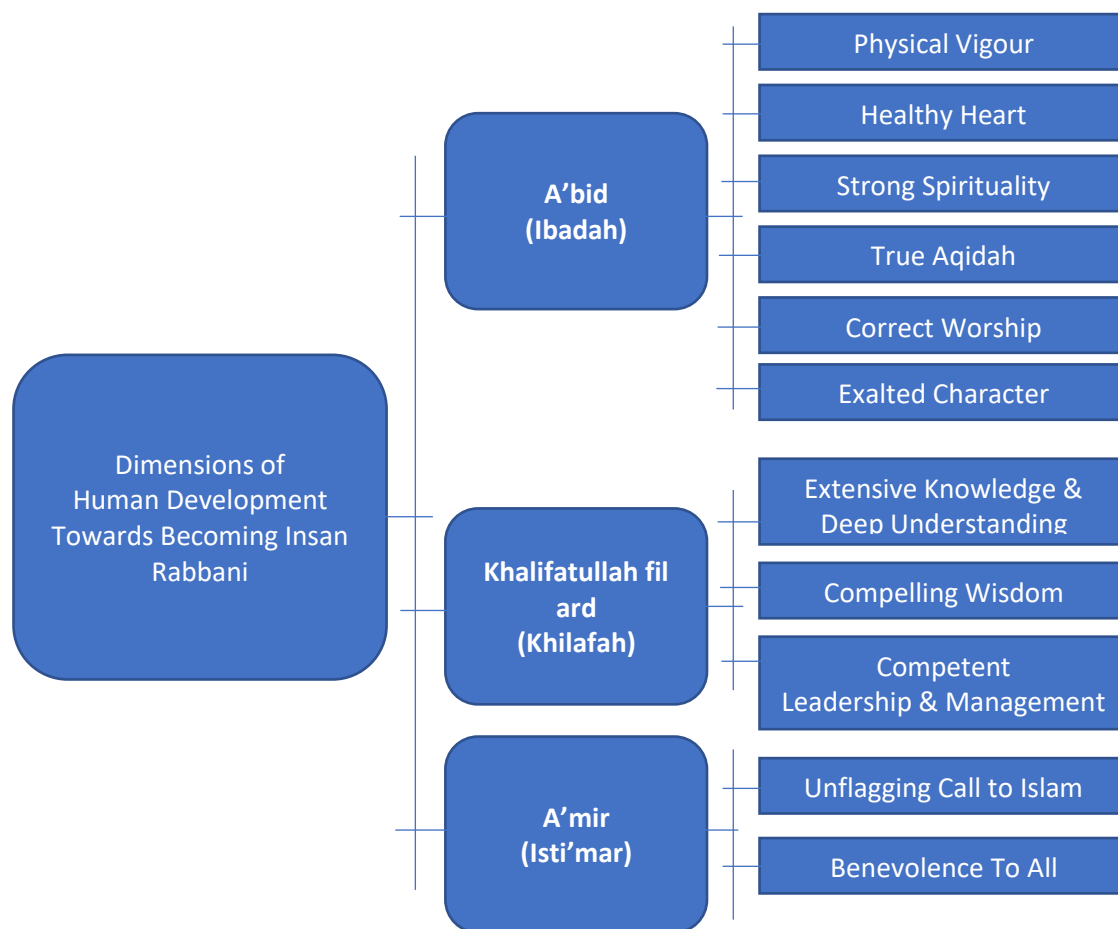
According to Ibn Hisham (213H) in the prophetic biography, Ibn Abbas (3H-68H) explains that Prophet Muhammad s.a.w. invited the Jews and Christians to become Muslims. They asked: O Muhammad! Are we invited to worship you as in Christianity who worship Jesus? The Prophet responded: “We seek refuge in Allah from this attitude, to worship other than Allah s.w.t. or to worship other than Him. I was not sent for that. Nor is it commanded to do so!” Then the verse 79 in surah Ali Imran was revealed which explained that it is not supposed that the Prophet ruled worship other than Allah s.w.t. They then became a part of the Rabbani generation through the teachings of the Book and following its contents. In that verse, Allah s.w.t. explains that the prophecy of the Prophet s.a.w. is to call mankind to become Rabbani generation as stated in surah Ali Imran verse 79 “Kunu Rabbaniyyin” (Be ye worshippers of Him Who is truly the Cherisher of all). The verse clearly shows the Prophet Muhammad s.a.w. conveyed to his people, from among sahabahs, tabiin, tabi 'tabiin up to the present generations, in order to guide them to become rabbani generation.

Another term relevant to human development in Islam is tazkiyyah (purification of the individual soul). Many muslim scholars have broadened the understanding of tazkiyyah beyond its mystical dimension to refer to the growth and purification of individuals in terms of their relationships with God, with themselves, with their fellow human beings and with the natural environment. The Arabic term commonly used to denote human development, tanmiyya (growth), is strongly connected with the economic and materialistic view. This is in some way similar to the predominant view of development in secular discourse. Tazkiyyah on the other hand encompasses physical, mental and spiritual aspects. Further, whereas tanmiyya, by implication, limits itself only to the positive – in terms of promoting activities that will lead to the desired state of growth; tazkiyyah goes beyond this to include activities that will also remove obstacles to well-being.

The principles of trusteeship (khalifa), well-being (falah) combined with growth and purification (tazkiyyah) provide a comprehensive understanding of human enrichment and flourishing in Islam. These concepts are holistic and relational. Based on these principles, the focus of human development emphasizes the needs to be holistic as decreed by God, in contrast with the the prevailing paradigm which is preoccupied with economic growth and the creation of wealth and material opulence.

The current single-minded focus on satisfying the economic and other material needs in total disregard of non-material and spiritual needs has disconnected humans from God, their own true nature and the natural environment. It depletes resources, degrades the environment and deepens inequality thereby harming well-being.

These ideas helped pave the way for the human development approach, which is about expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is a holistic approach that is focused on creating fair opportunities and choices for all people. All human beings are to become *Insan Rabbani*.



#### 4. Education in Human Development

Education is a conscious guidance given by educators to students to reach the maturity of a holistic and integrated human development. In terms of their positions, students are human beings who are in the process of development and growth according to their respective nature (Arifin, 1991). They need consistent guidance and direction to reach the optimal point of their natural abilities. Thus, in order to succeed, it must take the path of education as the process to all round development of the students.

Students are human beings who grow and develop. They are dynamic individuals who have certain characteristics in each part of development processes. This growth and development are natural processes that occurs in human life (Desmita, 2012). The development of students has consequences for the treatment of education. In the infant period, education is carried out

by adults through giving more assistance to physical development, such as the help of parents to children so that they can function their feet to walk. This continues until the child can control and function his organs. After that, in the kindergarten school age, the education process is not just to train his organs to function more perfectly but also to develop psychological abilities that begin to develop, for example, by developing courage through games (Sanjaya, 2008). This process of education treatment will continue and have stages according to the period and the characteristics of the development of the students.

All the potentials possessed by human beings can develop self-personality and others to reach perfection (insan kamil). Besides being determined by the basic aspects (fitrah), students' individual development is also influenced by teaching factors (environment) such as Manhaj Rabbani (Rabbanic Approach and Methodology), Bi'ah Solehah (Noble and Virtuous Environment) and Qudwah Hasanah (Good Example). Therefore, we have to have education programmes comprising of credible Curriculum, Instruction and Assessment properly and neatly combined in a constructive alignment to develop our children to become Insan Rabbani.

Education, is thus ta'dib (to instil good manners and conduct), that is the instilling and inculcations of adab (manners and good conduct) in man. The Qur'an testifies that the Holy Prophet s.a.w. is the ideal man who is the best example, whom the scholars have called the Perfect or Universal man (al-insan al-kulliy). Thus, the administration of knowledge in an Islamic educational system should reflect the Perfect Man.

According to al-Attas "an educated man is a good man", and by good, he means a man possessing adab in its full inclusive sense. A man of adab (insan adabi) is defined as: "the one who is sincerely conscious of his responsibilities towards Allah s.w.t.; who understands and fulfils his obligations to himself and others in his society with justice and who constantly strives to improve every aspect of himself towards perfection as man of adab" (insan adabi).

##### **5. IQRA as an Assessment in the Education process to be Insan Rabbani**

The International Quality Range Assessment (IQRA) for Islamic Education was developed in 2017. It is designed to assess, to what extent, students at the end of their compulsory education process have accomplished, the desired educational outcomes in terms of applying their knowledge to real-life situations and be equipped with the necessary knowledge and skills in order to function well in the society. IQRA is an on-going survey.

By establishing the 11 constructs in IQRA, the unique characteristics of a human being take centre stage in the Islamic Education system. The outcomes of education which has been neglected will be addressed by teachers, the students and parents. Insya Allah God willing, outcome-based education then becomes prominent in Islamic Education. The outcome of Islamic Education would be individuals imbued with the characteristics much loved by Allah s.w.t.

55 Action Oriented Thinking Items (AOTI) are used in the survey. These items have been subjected to vigorous psychometric analysis before they are adopted. There will be 5 items for each construct. Candidates will have their own reactions and responses when dealing with a situation. Their spontaneous reactions and responses symbolize their standpoints on the situation. Their standpoints were formed through the internalization process as a result of the education process.

Issues and choices of reactions to the issues, are being produced by them by means of the Multiple-Choice Items approach. This approach is used because students are assumed to be very familiar with this type of instrument. Furthermore, it is easy and quick to analyse in order to acquire the results of the assessment. Psychometric analysis will be referred to for measuring the applicability and integrity of this instrument.

Raw scores are derived from the scoring process of responding candidates to the items featured in IQRA. The raw scores shown, need to be seen as the basis for further assessment processes. Rasch's analysis is carried out on the data to position it in the Rasch Model, so as to enable us to obtain a linear measure to illustrate the becomingness of the students assessed. The raw data (raw score) obtained from IQRA is in ordinal form. Since data in the form of ordinal scale has its limitations in terms of statistical processing and analysis, it is transformed into interval forms with logit as the unit, to ensure standardization and accuracy of data interpretations. This is done using a Rasch-based analysis application.

The conversion from ordinal to interval scale (logit) is done to measure the difficulty (in selecting the ideal option) of each item, as well as to measure the ability (in this case, the becomingness) of each person. Using the logit value, the probability of a person choosing the ideal option which described the existence of the measured dimension is recorded for each item in a particular dimension. The probability values between 0 and 1 is then used as the standard score  $z$  (in percentages). Finally, the average of probabilities is determined for each dimension.

To create a becomingness profile for one person or one group, the averages of percentage (which indicates ownership of constructs measured) are presented in the form of a radar graph or a spider chart (spiderweb). Every point on the graph indicates where a person's position in terms of the dimension or construct measured. This position is regarded as a sign of reference to be used for improvement and development. The profile is not intended to indicate final achievements of individuals, and certainly not to be used to compare individuals. The measurement of becomingness can be determined for a single person, collectively for the whole group, or collectively for a particular group of interest (e.g., group based on gender, or group based on school location).

To communicate IQRA assessment results to students in an easy-to-understand situation, the Spider Web Graph approach is used. Below is a form of reporting that students who sit for IQRA to illustrate the stage of his becomingness in the 11 constructs assessed.

Fig. 1 shows how Spider Web Graph is used to represent the 'Indicator of Becomingness' for each of the construct (muwasofat) assessed i.e., Physical Vigour, Healthy Heart, Strong Spirituality, True Aqeedah / Faith, Correct Worship, Exalted Character, Extensive Knowledge & Deep Understanding, Compelling Wisdom, Competent Leadership & Management, Unflagging Call to Islam, Benevolence to All. Fig. 1 can be used to represent either individuals or groups.

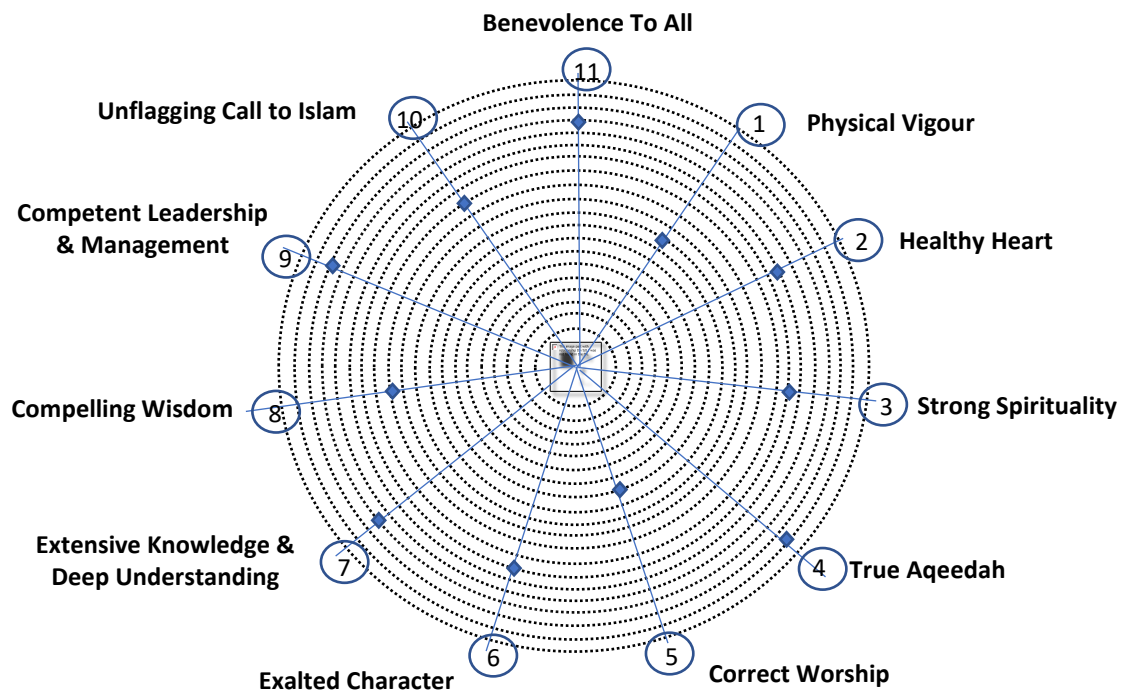


Fig. 1: Spider Web Graph

Fig. 2 shows how the ‘Field of Becomingness’ is demonstrated. The shape formed by joining all the ‘dots’ of the constructs represents the individual or group quality of the combined becomingness. The Field of Becomingness will show the quality of becomingness in terms of its ‘balance’ and ‘harmony’ aspects.

Let us imagine that the purpose of education is the destination and the subjects taught in schools becomes part of the journey towards that destination. The performance of a student in a particular subject as shown in the examination grade is a measure of his or her ability in the subject. It is actually the ability of a person to navigate through his journey. If the student stops along the journey, he or she has actually not yet reached his or her destination. Hence a dimension based on an empirical measurement process is required to illustrate the characteristics of one's achievement to a given destination. And this requirement is urgently needed in order to complete our educational process.

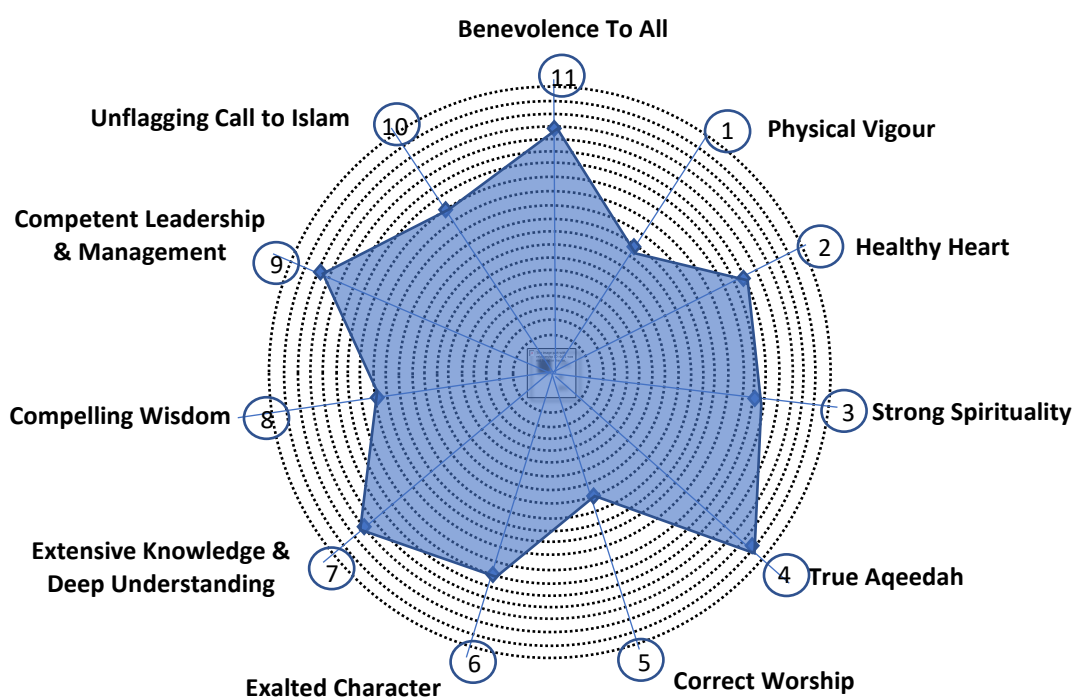


Fig. 2: Field of Becomingness

By looking at the quality of education based on its effectiveness and meaningfulness, the achievement in the subject is the measure of the effectiveness of the education. The individual's measure as a result of a learning process of those subjects reflects the meaningfulness. Using IQRA, determining the quality of education will be complete and perfect. The individual's score as a result of learning the subjects in school is also known as student's achievement. Thus, the becomingness of the student, recognized and acknowledge by IQRA, will be regarded as student's development.

In addition, assessments that place value on growth rather than on scores earned at one's discrete moment showed a higher motivation, greater agency and higher levels of cognitive engagement, as well as stronger achievement gains (Blumenfeld, Puro, & Mergendoller, 1992; Stiggins & Chappuis, 2005). In contrast, researchers have found that evaluative, comparison oriented testing, focused on judgments about students, leads to students' decreased interest in school, distancing from the learning environment, and a lowered sense of self-confidence and personal efficacy (Eccles & Roeser, 2009).

Diagram 1 shows the profile of four schools in terms of becomingness shown by IQRA. The information shown will assist schools to identify a partner or partners. This is where the relationship between public and private schools can be secured. School C (Public) can be the mentor of School A (Private). At the same time, School C (Public) can benefit the relationship with School D (Private) by taking the school as the mentor on certain aspects of becomingness. This shows that information revealed by IQRA can assist the realization of School-to-School collaboration by identifying potential mentors to guide the schools through projects and partnerships, to solve problems and to create opportunities for better learning.



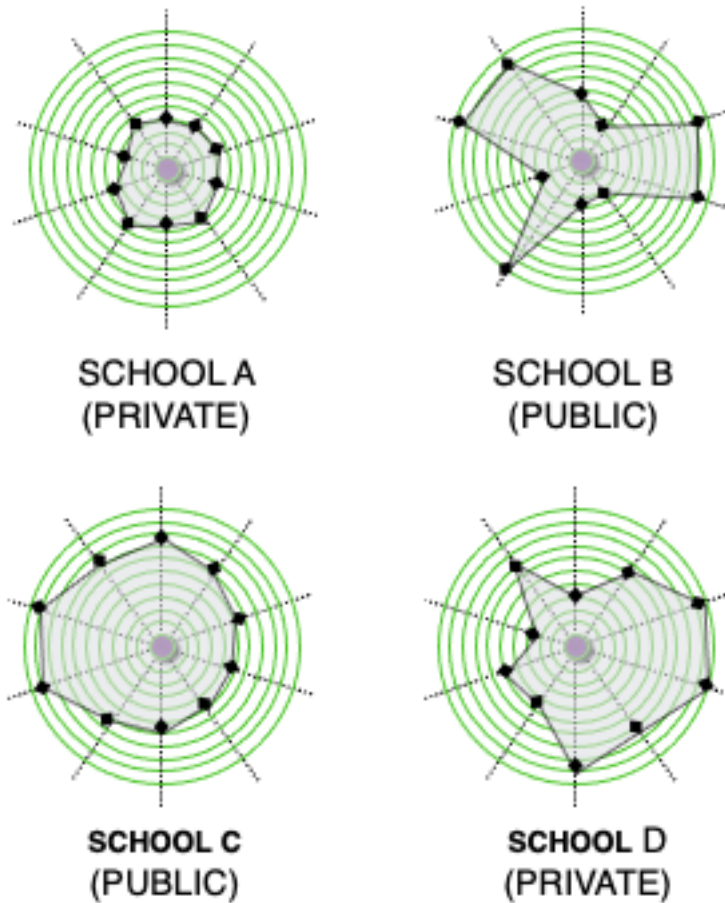


Diagram 1: Profile of Four Schools in Terms of Becomingness

When data on IQRA are shared at the international level, Diagram 2 below (as an example, not based on true data), a partner or partners from other countries can be identified and IQRA can assist to the realisation of collaborations for school improvements at international level InsyaAllah.

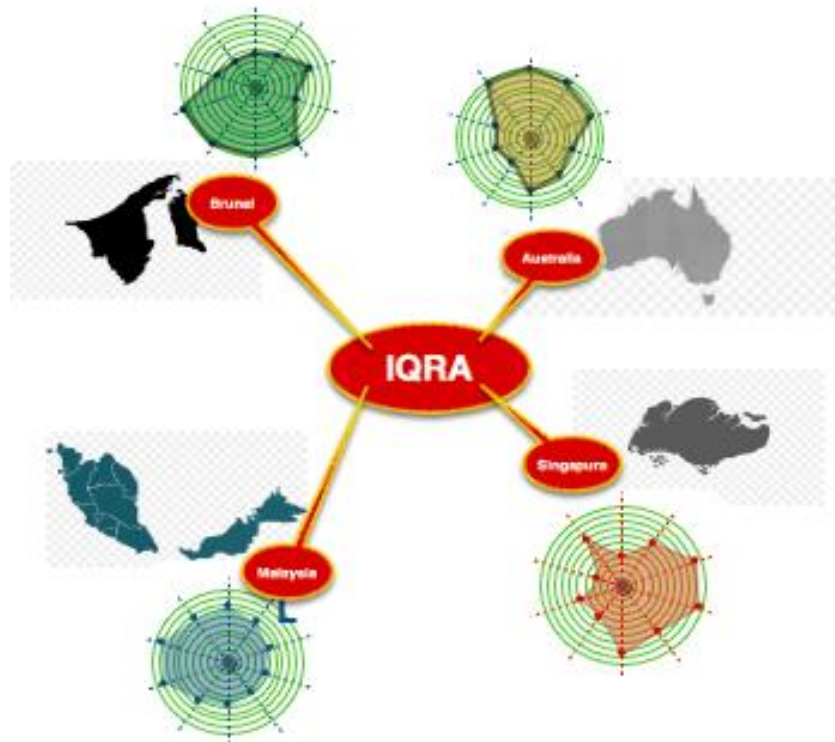


Diagram 2: Profile of Four Countries in Terms of Becomingness

## 6. Methodology

The researchers have developed IQRA 1.0 and currently in the midst of developing IQRA 2.0. In summary the following methodology was used in implementing IQRA 1.0 and IQRA 2.0. IQRA1.0 is essentially Objective, Multiple Choice and Dichotomous. Whereas IQRA2.0 is essentially Graded Objective, Multiple Choice and Partial Credit.

The methodology for IQRA1.0 was as follows: -

- The concept of assessment for education on human development is first developed.
- 10 constructs (or criteria) for the outcome of education that is Insan Rabbani were identified.
- 10 items (or instruments) for each construct based on Action Oriented Thinking Items (AOTI) were developed after a series of workshops and discussions.
- Test Run, Trial Run and pilot surveys were conducted before the administration of the actual IQRA1.0 was carried out.
- Students were required to respond to the IQRA1.0 survey by using Optical Mark Recognition (OMR) sheets.
- Psychometric analyses for responses obtained from 470 candidates (16-year-old students) were carried out.
- From the analyses the final 55 AOTI items were selected. The analyses indicated that the chosen 55 items were sufficient in eliciting information required.

The methodology for IQRA2.0 was as follows: -

- Using the similar steps as in IQRA1.0, IQRA2.0 was developed
- The difference between IQRA1.0 and IQRA2.0 are as follows: -
  - IQRA2.0 was administered fully as an online assessment

- Using the partial credit approach, the multiple-choice was polytomous instead of dichotomous
- We are currently moving forward with the development of IQRA2.1.
  - In contrast to IQRA1.0 and IQRA2.0, IQRA2.1 consists of 11 constructs instead of 10 constructs.
  - This new development for IQRA2.1 is based on feedbacks obtained through discussions from international partners.
- In IQRA1.0, where there is only one correct response, we lost significant amount of information on the actual becomingness of students.
- By using partial credit, all the choices are correct. Candidates must select the most correct response. Therefore, a much richer information about the candidate will be retrieved which is imperative for intervention programmes selected for each candidate. Eventually, this will achieve the purpose of assessment for education.
- Given the complexity of this project, we realize that there is still much work to be done to resolve issues related to human development.

### **7. The integration of ICT in the development and delivery of IQRA**

The Integration of ICT to realize IQRA as an Online Assessment for All, is needed to implement IQRA effectively and meaningfully in the development and delivery. Online IQRA integrates ICT as an enabler in the following:

- development processes
- administration
- data processing
- giving feedback
- analyzing
- reporting

Why On-line assessment? Why ICT enabled? IQRA is projected to play a significant role in the development of Insan Rabbani Formatively and Collaboratively. Integrating ICT as an enabler is the only solution.

ICT is necessary to link data from IQRA with modules of intervention designed for the development of Insan Rabbani. Thus, the IQRA and intervention modules combines in a formative assessment framework and building on the opportunities provided by computerized assessments, as well as harnessing teachers' experience in the development of particular constructs of Insan Rabbani.

Using IQRA for Student Development will help the education process see the quality of education at the outcome level, more concretely. The information presented on the Spider Web Graph can easily be understood and be used as reference to see the development periodically. It is indeed the CQI (Continuing Quality Improvement) in action. It can only be realized if IQRA is in a form of On-line Formative Assessment by integrating the latest ICT in its implementation.

The shape of development, both individual or group, are to be related with the demographic and other factors that may influence the quality of education which involves data of various kinds and features. It will be too complex to handle using the traditional approach. Again, it needs ICT. The improvement of the educational processes needs Big Data. Big Data is a term used to refer to the study and applications of data sets that are so big and complex, that traditional data-processing application software are inadequate to deal with.

Big data challenges include capturing data, data storage, data analysis, search, sharing, transfer, visualization, querying, updating, information privacy and data source. There are several concepts associated with big data: originally there are 3 concepts: *volume*, *variety*, *velocity*. Other concepts attributed with Big Data are *veracity* (i.e., *how much noise is in the data*) and *value*.

The 2007 article *Assessment Through the Students' Eyes*, by Rick Stiggins, sparks thoughts about how students of all ages are “data-based decision makers” who, when fully included in the assessment process, can help themselves build and maintain success. To enable all students to experience the productive emotional dynamics of winning, we need to move from the exclusive reliance on assessments that verify learning, to the use of assessments that support learning, that is, data-driven assessments *for* learning.

We will then know how to deliver professional development that will give practitioners the tools and technologies that they need in order to use assessment effectively in the service of student success. (Stiggins et al., 2004; Stiggins & Chappuis, 2006). Thus far, however, the immense potential of assessment for learning has gone largely untapped because we have failed to deliver the proper tools into the hands of teachers and school leaders. If we are to fulfill our mission of developing *Insan Rabbani*, we must adjust our vision of excellence in assessments in at least two important ways that will help us balance assessment *of* and assessment *for* learning by integrating ICT in our assessment practice.

In order to support learners, we believe that assessment systems need to incorporate effective feedback processes. However, as Perrenoud (1998) argued, feedback “can only be effective if a window is found into the cognitive system of the learner” (p. 88). Depending on the particular learner, their needs and a range of contextual factors, this “window” might be found by providing a simple statement as rapid corrective feedback (Hattie & Temperley, 2007) or it may require extensive teacher or peer interaction. For a computer system to be capable of the range of interactions that experienced teachers adaptively engage in with their pupils, is some way yet to be realised in the future. However, there are immediate benefits to be gained from computerized assessment systems, analysing the frequency and nature of student misunderstandings and feeding them into professional development discussions (Nichols et al., 2008). Furthermore, while fully automated feedback systems are challenging to be developed, there are also many opportunities to use relatively simple ICT tools, including Web 2.0 applications, to support peer assessment and feedback (Webb, 2010)

What will guide us? ICT enabled Assessment is new to us: We must learn from others. IQRA is designed as an ICT enabled assessment. ICT is integrated in its development, administration, linking to intervention programmes, reporting and analysis. It is meant for helping in setting and monitoring targets for individual students and groups towards becoming *Insan Rabbani*. The nature of assessment thus requires some clarification because the word is used for both a process of acquiring evidence and a label for a judgement of results based on specific worthiness. We need to know whether the purpose and effect of a particular assessment is educative (Wiggins, 1999), formative (FOR learning) or is it to assess the extent of an attained state of education (OF learning) or whether both purposes can be achieved through the same process. In addition, the word ‘assessment’ is used for both the act of judging the evidence and the results of that act. These considerations and use of terms can lead to confusion in conversations, policy circles and in practice (Harlen & James, 1997), because there are at least four ways to think about assessment, all of which can be supported, enabled or enhanced by ICT (Table 1).

Table 1: Four Ways to Think About Assessment

		<b>Process Focus</b>	<b>Result Focus</b>
Assessment FOR learning		Feedback information	Improvement decisions
Assessment OF learning		Degree of engagement with/understanding of process	Value judgement

In delivering On-line IQRA, generic guides are observed namely: The Conceptual Assessment Framework and The four principal processes in the assessment cycle.

The blueprint for an assessment is called the Conceptual Assessment Framework. To make it easier to rearrange the pieces of the framework (and to deal with one at a time when appropriate), the framework is divided into a number of pieces called models. Each model provides specifications that answer such critical questions as “What are we assessing?” or “How do we assess it?”

These models are a bridge between the assessment argument and the operational activities of an assessment system. Looking to the assessment argument, they provide a formal framework for specifying the knowledge and skills to be measured, the conditions under which observations will be made, and the nature of the evidence that will be gathered to support the intended inference. Looking to the operational assessment, they describe the requirements for the processes in the assessment delivery system.

Assessments are delivered in a variety of platforms. Paper-and-pencil tests are still the most widely used, oral exams have a long history, and the use of computer-based tests is growing rapidly. New ways to deliver tests are making an appearance as well: over the Web, over the phone, and with hand-held devices.

To assist in planning for all these diverse ways of delivering a test, IQRA refers to a generic framework: the Four-process Delivery Architecture. The Four-process Delivery Architecture which are (i) Presentation Process (ii) Response Processing (iii) Summary Scoring Process (iv) Activity Selection Process, are an ideal system since any realized assessment system, must contain these four processes in some form or other. They are essential to make the observations and draw inferences that comprise an assessment argument. This is true whether some of the processes degenerate or collapsed in a given system, and regardless of whether they are carried out by humans, computers, or human-computer interactions.

In this context, we consider validity in relation to the purposes of assessments by examining threats to validity using Crooks et al.’s chain model of assessment (1996). The validity of an assessment assures that it measures what it purports to measure, whereas reliability assures that it does so across a range of implementations. It is generally accepted that a psychometrically useful assessment should have both validity and reliability (Kline, 1998). Current theories of validity owe much to the work of Messick (e.g. Messick, 1994) who emphasized the importance of reasoning from the evidence towards inferences and actions. Thus, the concept of validity is associated with the use of a particular assessment rather than the assessment instrument itself and therefore, validity relates to the purpose of the assessment. How the resulting data are to be used is crucial (Stobart, 2009).

What We Have Learnt and Our Recommendation for Future Development. IQRA also proves that ICT provides new ways of collecting assessment data as well as supporting a range of different purposes of assessment, including ways of using the data to make judgements about becomingness as well as to support learning, using intervention module attached to it.

This broadening of assessment is based on a view that there are aspects of learning that are important but cannot be adequately assessed by formal external tests. These aspects require human judgement to integrate the many elements of becomingness as things to be assessed.

Developments of digitally enhanced assessments are at an early stage, but they have the potential to increase the range of assessment measures, thus contributing to complete construct representations and increasing the authenticity of assessment. Improvements in computer-supported statistical analysis promise to make the analysis of the enormous quantities of data generated, more manageable.

Giving data on BECOMINGNESS of the learners towards becoming Insan Rabbani is a new dimension in their education process. This is besides the result of exam in subjects they learn in school which will make their education process more effective and more meaningful beyond academic performance. This provides ways of moving assessment design towards a more user-centred approach and particularly of meeting learners' needs. We realise and understand that IQRA is far from perfect, but we strongly believe that it will give a new face to assessment practice in education. This ICT enabled assessment will also appear as a friendly partner to learners so that they will know where they are and where they want to be and how the information which appears on the screen of IQRA will help them to take action to develop themselves to become Insan Rabbani.

## 8. Conclusion

Within the last century, the theoretical underpinnings of education have developed from the behavioral, cognitive science and quite recently the constructive, based on the humanistic assumption perspectives. The aims of education are not only restricted to students' achievement in the academic field as reflected in their examination performance. The results indicate their performance to master, which may sometimes be questionable, certain domain of knowledge with little or no emphasis given to the question of what has the student become, after undergoing the process of education for a certain number of years. Becomingness refers to the students' learning outcome (as opposed to output) of the educational processes as we prepare them to meet real-life challenges.

Our experience in developing and conducting IQRA has convinced us of two important things. Firstly, students' educational assessment for learning through IQRA approach has a huge potential impact in providing guidelines for students' or more widely, human development. The data produced from IQRA provides guidelines in developing intervention programs to improve areas (or constructs) that needs enhancing. The appropriate intervention programs are still at their development stage; thus, it is not reported here. Secondly, the use of online assessment approach in conducting IQRA has an enormous impact on improving the effectiveness in conducting IQRA. We believe that the online approach will be effective in transforming assessment practices to support the needs of learners as well as the needs of educational systems (e.g. classroom practices, school organizations, and national priorities) in the 21<sup>st</sup> century and beyond.

There are, obviously a number of challenges that needs to be resolved. The challenges of IQRA online assessments are tremendous and need to be addressed. At this stage of development, after undergoing various rigorous psychometric and statistical procedures in ascertaining the reliability and validity of IQRA, the ultimate challenge is to make IQRA in online form. We are in the final stages and let us make doa that our efforts will be successful.

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**Biodata**

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	<p>Khodori Ahmad obtained his doctorate degree in the field of educational testing and measurement from the University of Sussex and has been involved in this area for more than 40 years. He started his career as a trainer and a teacher, before he joined Malaysian Examinations Syndicate (MES) in 1977. In MES, he had been a test developer, the Chief Assistant Director, the Head of Sector, and retired as the Deputy Director (Production) of MES. His expertise and experiences have given him the opportunity to be a leader in various developments in this field. Among the projects under his leadership and his most significant contributions to the Malaysian educational assessment are: the designs of various types of conventional and alternative assessments used in the national examination system (UPSR, PTS, criterion-based,</p>



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	<p>Megat Mohamed Amin Megat Mohamed Nor obtained his LLB Islamic Law and Jurisprudence. He however pursued his career not as a lawyer but as a teacher in a private Islamic primary school which focused on educating students with adab, akhlak and Islamic character towards generating Insan Rabbani students. He proceeded to become Headmaster of the same school, then moved to become the Principal for a private Islamic secondary school and Director of a network of private Islamic and educational institutions. He obtained a Diploma in Management from Malaysian Institute of Management and Diploma Dakwah &amp; Pendidikan from Akademi Islah Malaysia (JIM). Currently, he is the Executive Director of IKRAM-MUSLEH which has a network of 50 private Islamic preschool, primary and secondary schools fully owned by Pertubuhan Ikram Malaysia (IKRAM). He has been involved in the administration, management and leadership of private Islamic schools and educational institutions. He is actively involved as a consultant in Islamic education, the development of Islamic education systems and in trainings on topics directly and indirectly related to education to various groups particularly to school and educational leaderships, managers, administrators as well as teachers and community leaders. He has vast experience in managing and administering <i>Manhaj Tarbiah IKRAM-MUSLEH</i> or simply an integrated and holistic programme for Islamic character education for IKRAM-MUSLEH. He has contributed articles in books, appeared on TV programmes and involved in disseminating Islamic education at the national and international level for example Round Table Discussions, Focus Group Discussions, Workshops, Symposiums, Seminars and Conferences. He is currently the Secretary for <i>Gabungan Persatuan Pendidikan Islam Malaysia</i> (a coalition of Islamic education NGOs Malaysia), the Secretary for International Centre for Educational Excellence (a coalition of Islamic education NGOs globally) and the Secretary for <i>Inisiatif Pengislahan Pendidikan Nasional</i> (a coalition of multi-ethnic education NGOs Malaysia). He is a project committee member for the development of Students Becomingness Assessment instrument for MOE Malaysia.</p>