"Learning Outcomes Blaze™"

Frequently Asked Questions (FAQs)

1. What is "Learning Outcomes Blaze TM"?

"Learning Outcomes BlazeTM" is an innovative unique software application built to help Higher Education Institutions (HEIs) to solve a critical standing problem in an outcome-based Education (OBE) environment, which is "How to evaluate the delivery and attainment of institutional graduate attributes, program/student learning outcomes & course learning outcomes?". The developed software follows a rational logical patented methodology.

HEIs are basically struggling to measure the core institutional initiatives such as graduate attributes (GAs), program learning outcomes (PLOs) / student learning outcomes (SLOs) and course learning outcomes (CLOs) as there is no scientific method to accomplish these traits. In addition, the requirement to inculcate, measure and evaluate the vocational/technical competencies or soft skills as directed by national qualifications frameworks authorities have been a tremendous challenge to HEIs.

The software "Learning Outcomes BlazeTM" is developed from a research based patented methodology to critically address the staid concern in an OBE environment. The software efficiently supports to measure these traits through a process of mapping and framing authentic formal assessments. The software thus supports to identify the flaws in the quality of education & efficiently helps to improve upon it through smart assessments management and evaluation practices.

2. What is the problem statement and how does "Learning Outcomes Blaze™" relate as a solution?

To the big question "How to evaluate the delivery & attainment of institutional graduate attributes, program learning outcomes & course learning outcomes?" every academic institution is looking for a feasible, rational and systematic solution!!!

In order to evaluate the delivery & attainment of these traits that is the institutional graduate attributes, program learning outcomes & course learning outcomes, mostly HEIs have been using various traditional methods such as feedbacks, surveys, reports, questionnaires, observations, interviews and that too varies from different agencies and nations, hence lack of consistency at a global level. Another point is that though these methods are valid to a limited extent, are not measurable and still stands as views and insights of individuals and most importantly are influenced under various conditions. What is more critical and challenging is that there is no such scientific method to measure these traits. The seriousness and criticality immensely elevate when it is known that the entire OBE education environment stands to deliver and achieve these traits but there is yet no such scientific method.

To address this critical issue, we are here to present a very unique, innovative, patented, feasible & rational methodology, with which the entire OBE educational fraternity would exceedingly benefit. In our methodology, formal assessment holds formal & scientific values to authentically evaluate and reflect the delivered curriculum thus formal grades of each student in each assessment in each course is to be systematically archived. Defining, mapping, assessing, systematic sequence of logical processes with highly complicated automated mathematical calculations and formulas are the main components used in our methodology.

In order to facilitate the application of this methodology with the support of information technology, a unique, innovative software has been developed and registered as "Learning Outcomes BlazeTM". Hence the software "Learning Outcomes BlazeTM" stands as an apt solution to the standing critical problem to "How to evaluate the delivery & attainment of institutional graduate attributes, program learning outcomes & course learning outcomes?"

3. How does "Learning Outcomes BlazeTM" function?

Our software "Learning Outcomes BlazeTM" uses a patented, scientific methodology to derive the calculations and tabulate the results. The software solely uses grades of formal assessment, where every piece of assessment grades is universally known as authentic and evident in official transcripts. Hence the software solely works on authentic formal grades received via formal assessments. Defining, mapping, assessing, systematic sequence of logical processes with highly complicated automated mathematical calculations and formulas are the main components used in the software.

4. Is "Learning Outcomes Blaze™" an enterprise resource planning (ERP) software?

No, "Learning Outcomes BlazeTM" is not an ERP software, rather it is a highly sophisticated, specialized intelligent software created and developed with specific objectives to measure the GAs, PLOs/SLOs and CLOs, which directly means the quality of education in an OBE environment. It is based on a patented, scientific methodology to derive the calculations and to formally tabulate the results. It exclusively uses assessment grades as input to process the entire system. This software is built involving tremendous efforts that inculcates expertise, skills, knowledge and experience of HEI academicians, experienced in American and British system of education, inculcated with relevant study, research and consultancy into its core development.

On the other hand, an ERP software facilitates core business modules such as finance and payroll, accounting, registration, student advising, human resources, library management, attendance, hostel, transportation to name a few.

5. What are the benefits of this software to various stakeholders of HEIs?

Various stakeholders in an academic institution, including the management, faculty members, students and employers would receive a clear portrait of the entire process with respect to the gained outcomes. The strengths and weaknesses of various entities, whether it be students, courses or academic programs, is explicitly highlighted by the system, therefore saving upon enormous time and effort to identify, develop and improve the quality of education. A brief illustration of benefits to various stakeholders is stated below:

Management

- The software will highlight the resilient and frail areas of every course within an academic program. The institution can then build upon the detected ailing areas to further build and develop the course.
- Various levels of comparison between the institutional core attributes could be executed and build upon. For example a learning outcome is not as effective as other, or a learning outcome is weakly delivered in a course.
- The institution would know if it is moving in the right direction to achieve its vision and mission, as planned. The institution can benchmark and fix the outcomes to a certain minimum standard. For example, in a list

of core courses with in an academic program, the minimum amount of graduate attributes to be delivered should be at least 70%. Or the delivery of a particular course learning outcome should not fall below 20% in a course. Once such

- Statistics could be very well used for accreditation purposes.
- Overall quality of the delivered education could be evidently enhanced.
- Data can be comprehensively used for research and analytical purposes.

Students

• The software can produce an official transcript for each student that would indicate the strengths and weaknesses of each student in each course during the entire academic program. This will help the student to choose the right career. For example, it is often seen that a graduate who was academically strong in X area landed up taking a job in Y area which was just a contrasting area out of his/her interest.

Faculty

- Faculty member can compare the delivery of graduate attributes and program/student learning outcomes, identify the flaws, if any.
- Course learning outcomes can be tracked and appropriately aligned with assessments.
- Faculty member can further develop and build upon a course, and the academic program, based on the detected fragile areas.
- Faculty member can evaluate the efficacy of his/her own delivered course and could improve upon fragile areas.
- Assessment practices can be self-evaluated.
- Delivery of curriculum with respect to assessments can be improved.

Employers

• Based on the highlighted strengths and weaknesses of the graduate, employers can aptly recruit the right candidate for the right job, saving on tremendous time and effort spent for recruitment and selection of the right candidate for a job. Appropriate selection and recruitments of the graduates can be enforced.

6. What is special with "Learning Outcomes Blaze™"?

The software is a unique product which is developed followed by years of research, consultancy and feedback from various senior academic experts across the globe. It is 100% academics, researched, created, and built by academic experts to be solely used by academics for academic and research purposes. Apart from years of research, consultancy and thought processes, the product technically involved a team of six dedicated IT experts, built via rigorous software development of 3000+ hours. The product is developed to serve the academic fraternity and to help address the standing global issue to efficiently measure the delivery and attainment of GAs, PLOs/SLOs and CLOs. Enhanced version of the software helps to measure the qualifications frameworks (QFs), technical and vocational competencies (TCs/VCs), which is much required for the job market requirements.

7. How does the software "Learning Outcomes BlazeTM" critically support HEIs?

Most critical challenge faced by HEIs is with respect the quality of education, since the core functioning of HEIs is meant to deliver the best quality of education in all aspects.

In an OBE environment:

- HEIs are seriously concerned, challenged and mostly are unable to scientifically measure the GAs, PLOs/SLOs and CLOs.
- Assessments could not be formally mapped or tracked with respect to the curriculum and learning outcomes.
- HEIs are unable to highlight the strengths and weaknesses of the graduates making difficult for the employers to hire the right graduate for the right job leading to severe professional complications.
- Technical and vocational competencies are usually left behind in an academic environment thereby creating a havoc between the educational institutions and the job market requirements.
- The strengths and weaknesses of courses and academic programs are not scientifically identified or addressed; therefore, the quality of education could not be improved as anticipated.
- National or international qualifications framework guidelines could not be fulfilled or improved until the flaws in the quality of education and its corresponding system are scientifically traced.

The software "Learning Outcomes BlazeTM" is designed and built to produce statistics that helps to efficiently solve these standing issues.

8. What are the salient features of "Learning Outcomes Blaze™"?

"Learning Outcomes BlazeTM" software is rationally intended to produce incredible effectiveness to the development of an academic program, throughout the educational processes. The software helps to systematically determine the strengths and weaknesses of students, courses and academic programs, thereby proposing to effectively build on academic programs to overcome its failures and sustain efficacy to meet the institutional expectations. The software follows an authentic digital statistical and measurable technique, using formal assessment grades. It uses the grades received in assessments to measure the delivery and attainment of these attributes. With advanced systems and technological measures in place, the software hubs to track every individual student's performance through course assessments. Student's performance, through every course is trailed via received grades in the assessments. Predefined sequence of steps and procedures need to be precisely adopted and grades of all assessments have to be formally tracked, archived and recorded by the institution for the system to be fully functional.

9. What is the output of the software "Learning Outcomes Blaze™"?

"Learning Outcomes BlazeTM" software would produce statistics to:

- Show the delivery and attainment of GAs, PLOs/SLOs, CLOs in every course, for every individual student.
- Identify and compare the efficacy of delivery and attainment of each GAs, PLOs/SLOs, CLOs.
- Identify the strengths and weaknesses of courses, academic programs.
- Evaluate the effectiveness of course contents with respect to assessments.
- Find out the correlation between delivered and attained statistics.
- Support and affirm the quality assurance (QA) processes.

10. What are the key components of "Learning Outcomes Blaze™"?

Some of the key components of the software "Learning Outcomes Blaze™", but not limited to, are:

User management.

- Academic years and semesters management.
- Defining courses, academic programs, assessments, faculty and student profiles.
- Defining and aligning GAs, PLOs/SLOs, CLOs.
- Defining QFs and TCs/VCs.
- Defining and aligning assessment performance criteria's (APCs).
- Curriculum mapping between assessments and APCs, CLOs, GAs, PLOs, QFs and TCs.
- Assessment performance achievements.
- Stream grades and statistics.
- Faculty KPIs with respect to the courses.
- Generate reports for analysis, quality assurance and accreditation purposes.
- Students' performance reports with graphs/statistics.
- Cloud hosting based highly secured service.
- Annual maintenance and support contract.
- Support and training activities.

11. How safe is the data and where is the software hosted?

Cloud hosting and services are proven and well known for utmost data safety, security, storage and proficient access of huge quantity of data. "Learning Outcomes BlazeTM" is hosted on cloud server and ensures utmost data reliability and security of data through various levels of authentic measures that is an integral component of cloud server facility. Multiple users at various levels could efficiently access the software from every corner of the globe.

12. What is the different type of user for this software?

Apart from a super user who would have all the technical control and system rights to manage the software, core users of the system are academics i.e. faculty members. Apart from the faculty members roles and responsibilities can be created and assigned for other users based on the institutional requirement.

13. Can the software be further customized to HEIs requirements?

Though the concept and functioning of the software fully serves the core requirements of HEIs, software can be further customized to fit additional requirements of the institution. Several existing vital queries and reports are auto generated and will mostly suffice the core institutional requirements. These queries and reports will support and enhance the decision-making process with respect to students, courses and academic programs and at various levels of faculty, middle management and senior management and would also support the external stakeholders such as the industry and employers. In addition, customized modules, queries and reports can also be studied and efficiently developed as per the requirements and demands of the institution. However, involvement of technical team will be required for such customizations.

14. What is the scientific & innovative significance of this software?

Based on the preliminary feedback from concerned stakeholders, this innovative product is too exciting & very promising.

- Such product is being anticipated and being looked forward by various educational institutions across the
 globe. Since the outcomes of the product leads to detect the flaws, identify the key areas of improvements
 in academics both in the courses as well the academic programs, identify the strengths & weaknesses of the
 students, raise the educational standards and quality of education & most importantly contributes to the
 development of efficient human capital.
- The main strength of this product is that it is built using a patented methodology titled "computational methodology towards attainment of graduate attributes and program learning outcomes in an outcome based educational system", that demonstrates and implements a unique refined systematic methodology.
- From the scientific and innovative aspect, the product follows a methodical approach to calculate and measure the learning outcomes. Produced statistics would indicate improvements and developments to the quality of education.
- This full-fledged ground breaking professional product represents an educational technological framework, which can be customized to fit the requirements of HEIs across the globe.
- The software follows a methodical approach to calculate and measure the learning outcomes. Produced statistics would indicate improvements and developments to the quality of education impacting its community or the nation as a whole, in this competitive and challenging ecosphere.

15. What are the economic impacts of this software?

From an economical perspective, the proposed software is expected to:

- Produce highly capable graduates thereby saving on the nationals seeking employment.
- Improve and benchmark the quality of education, thus attracting foreign investments.
- Build on self-support strategies thereby saving on external consultancy or external support.
- Produce better quality services to raise the standards of community and nation, with the support of developed and highly capable human capital.

16. How does the system work?

- The system generally involves all the stakeholders such as the faculty and management, the roles of each stakeholder will be clearly defined. Super users would have access to the entire system.
- Like any IT based system, systematic data entry is the key, hence data entry in a systematic mode plays a critical role to operate the system. Grades are vital set of data to be fed into the system.
- Course mappings at multiple levels are very important to the system.
- Once the core settings, mappings and data entry of the grades is accomplished, the system will take over, calculate, tabulate and produce all the necessary statistical reports for efficient decision-making processes.

17. What are the strengths of "Learning Outcomes Blaze™"?

"Learning Outcomes BlazeTM" is:

- Exceptional (a unique product in the entire globe; such product does not exist; simultaneously too vital)
- Creative (created to measure the quality of education; delivery and attainment of GAs; PLOs; CLOs; QFs; TCs; uses complex mathematical calculations with the concepts of reverse engineering)
- Compatible (is compatible with existing institutional systems)
- Adaptable (can be customized to aptly fit the institutional requirements)
- Competent (built to proficiently suffice the core academic requirements)
- Sustainable (designed to fulfill and sustain competitive academic requirements; frameworks and accreditations)

18. What are the key highlights of "Learning Outcomes Blaze™"?

"Learning Outcomes BlazeTM" is:

- A product which is produced and created from 3000+ hours of effort in its software development followed by 2000+ hours of its prototype design, sequentially followed by years of consultation, research work in the field.
- Developed in consultation with various academic experts specialized in the American and British education system.
- An innovative, unique and a standard high end smart product much sought by HEIs, built with smart reports and derived from highly complex scientific calculations.
- Just one of a kind unique product in the entire globe.

19. What are the procurement and deployment options?

"Learning Outcomes BlazeTM" is readily available for procurement, deployment, implementation and training in its current form and would require 2-3 months without any customizations. However, customizations would require professional services and efforts of the technical development team.
