

# Academagogical Framework for Effective University Education

Promoting Millennial Centric Learning in Global Knowledge Society

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**Abstract**—Tectonic shifts are rapidly occurring in the education-space. Two streams of thought are rapidly emerging:

- Current academia produce fails to meet industry expectations, thus, impacting employability readiness of fresh entrants into the corporate;
- Life-style changes in millennials, concomitant with technology advancements, rendering current academic approaches inadequate, and outdated

This paper reflects on the current educational practices and suggests a framework that draws from the best practices of learning methods, leveraging on technological and life-style changes, to make university education more relevant, and effective.

The proposed framework hinges on the precept of heutagogy with a learner-centric focus that actively empowers participants in building effective learning content, and delivery methods, thus promoting joint-ownership to university programs and courses.

**Keywords**—education, employability, skill-gaps, learning methods, eLearning, heutagogy, role-plays, academagogy

## I. BACKGROUND

Employability of university graduates and their lack of industry readiness has been a cause for concern across the globe. In the Indian context, less than 25% of engineers are found employable by industry [1]. Anecdotal figures indicate that it takes 3 to 6 months of training by industry for fresh entrants to become productive and billable.

While skill-gaps in university graduates is one side of malaise, it is apparent that the learning approaches in academia are not in sync with lifestyle changes of the millennials (those born after 1980) to be effective. Prensky [2] opines “today’s students are no longer the people our educational system was designed to teach.”

Numerous surveys have identified skill-gaps emanating from educational system vis-à-vis industry expectations. The Microsoft education competency-wheel [3] captures thirty-seven skills needed by today’s millennial workforce.

Whilst pedagogical paradigms, such as, story-based case-study curriculum, and experiential learning [4] applying higher levels of Bloom’s taxonomy [5] have become part of university curriculum, supplementary educational initiatives like finishing-schools and behavior-skills programs have in recent times found their presence in academic precincts. Notwithstanding these initiatives, skill-gaps persist; and industry continues to lament on lack of employability readiness of university students.

This paper proposes an academagogical framework that knits academic rigors with professional and behavioral skills in an integrated fabric to suit university curriculum.

## II. FRAMEWORK DEFINITION, BENEFITS AND SCOPE

Academagogy, a term coined by McAuliffe, Winter, Chadwick and Hargreaves [6] coalesces a range of learning approaches: teacher-centric “pedagogy,” participant-centric “andragogy,” and participant-driven “heutagogy.”

The framework hinges on social constructivism [7] and seeks to align educational outcomes with industry expectations. It emphasizes on active enablement with technologies, and effective engagement with the millennials to build a vibrant learning ecology.

The efficacy of framework is measured through verifiable outcomes that include feedback 360 degree surveys, and performance descriptors obtained through assessment instruments.

The framework offers three major benefits:

- promotes joint ownership of outcome based academic curriculum between the learners and facilitators
- encourages communication and teamwork
- leverages on the millennial need for social connectivity on 24x7 basis

More significantly, the framework supports:

- holistic transformation from using of information to application of wisdom
- converting knowledge into action through experiential learning and simulated role plays
- nurturing positive attitudes impacting behavioral transformation

## III. APPLYING THE FRAMEWORK

A case study reported by Queensland University [8], provides a good start point for building an academagogical framework based on learning principles.

The input to the framework is a conventional academic syllabus. Learning principles and academagogical constructs are applied to the syllabus to derive learning components and outcomes.

The learning components are then delineated into structured tasks (e.g. case-studies, role-plays, project work), assessments (e.g. tests, quizzes, seminars, project competitions), and reflection tasks (e.g. product evaluation, critiques, interpretative survey and analysis).

The delivery of curriculum is jointly negotiated between the learners and facilitators, much akin to a client-supplier relationship in industry. The scope of learning delivery should include professional competencies and behavioral skills that address industry needs.

The application of the framework to curriculum development passes through various stages of: (a) engagement between stakeholders (learners, facilitators and consultants); (b) exploration (learning content and methodology); (c) enablement (fixing up accountability); (d) execution (active learning and achievement of outcomes); and, (e) enrichment (effecting improvement based upon experience and feedback).

Whilst applying the model, special effort is needed to leverage the strengths of millennial learners and their life styles [9]. Deliverables from the course should therefore encourage social connectivity, group work, flexible creative settings, and more importantly, empower the learners for lifelong learning commitment.

The efficacy of the framework could be measured through ethnographic techniques [10]. These include: (a) performance assessment of learners; (b) quality of deliverables produced; (c) engagement levels with learners; (d) feedback surveys from the participants; (e) note taking; (f) informal interviews with learners; and (g) direct observation. The results so obtained can be compared with similar programs run without an academagogical framework. The degree of effectiveness of academagogical interventions can thus be established.

#### IV. CHALLENGES ON FRAMEWORK IMPLEMENTATION

The crucial challenge to implementing an academagogical framework is the acceptance to change and a flexible mindset. For faculty members in universities who have got used to the "Sage on the Stage" paradigm, it indeed becomes difficult to accept learners as equal participants.

Outcome based learning involves intricate level planning and execution in creation of appropriate tasks, case-lets, and project work that have realism in application. The effort should be to incorporate the higher levels of learning of Bloom's taxonomy (analysis – evaluation – creation) in cognitive domain, and emphasizing on learning by doing for psychomotor domain.

The challenge at hand therefore, is mainly of change management. In this context, the introduction and implementation of academagogical framework can follow Lewin's model, as revised and extended by Schein [11].

#### V. LIMITATIONS OF PROPOSED FRAMEWORK

The success of academagogical framework lies in the quality of mentoring done by the facilitators. The faculty should be ready to don this new role and earn the confidence of their mentees. Therefore, the framework should initially be restricted to a class size of about 30 to 40 students. Scalability of the model is therefore open to debate.

The learning methodology used in the model puts the onus and accountability of learning on the students. The model assumes that the students are capable of self-directed learning. It is therefore recommended that the initial deployment of this model be applied to technical or professional courses where learner's maturity is higher.

The university or institutes employing the model should have requisite technologies and bandwidth to support eLearning, wiki, blogs and other collaborative learning spaces in the internet.

There should also be adequate flexibility in the university or institutions to experiment with fresh approaches and plug and play content and delivery methods to suit a new style of learning.

Lastly, the framework demands an open mindset where innovative ideas thrive.

#### VI. CONCLUSIONS

Learning approaches to build competencies for knowledge-driven society and meet aspirations of millennial learners requires paradigm shifts.

In fact, some of the career descriptions in the corporate of future do not exist today! Therefore, it becomes pertinent that the academic environs remain agile to the developments, not merely technological, but more importantly, environmental, cultural and societal. The value shifts in the millennial society would become powerful drivers of learning impetus and direction.

The academagogical framework presented in this paper is one such effort to bridge the competency-gaps while keeping aligned to technology, environmental and societal changes. The framework needs to be validated, and fine-tuned, both in university and higher education settings, as well as, corporate training, especially for entry level professionals.

The author would invite academia and corporate to experiment with this academagogical framework and build it upon their experiences and feedback from implementation.

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