

# Enhancing Graduates' Employability with Market Driven Pedagogy of Financial Economics Specific Skill for Decision Making

Matthew Goldman Kimher Lim and Hazri Jamil

**Abstract**—the meaning of market driven is discussed to set a background of employability. Global issues in youth's unemployment are identified as well as resolutions in few countries. To enhance specific graduates' employment prospect, this paper suggest that integration between tertiary education and industry's requirement can be more effectively interlinked with a market driven pedagogy of scalable tri-educational approach that consolidates selective prior basic knowledge alongside a closely monitored continuous professional development program within a work integrated dissertation environment to formulate a pedagogy in financial economics specific skills. The pedagogic aim would be to develop specific graduates with constructive decision making abilities that address high value questions in this fast informative era with specific content treating money as a tradable resource commodity for increased ROE which optimized risks within reliable high value information and within diversification options having known the opportunities presented, themoney quantum needed and the expectedtime ROI and ROE.

**Index Terms**—career advancement, employability, financial economics, human capital, marketdriven pedagogy.

## I. INTRODUCTION

To enhance specific graduates' employment prospect, this paper would argue that integration between tertiary education and industry's requirement would be more effectively interlinked with a market driven pedagogy that would consist of a scalable tri-educational approach to consolidate selective prior knowledge alongside a closely monitored Continuous Professional Development (CPD) program and a Work Integrated Dissertation Environment (WIDE) to formulate an aim that would develop constructive decision making in financial economics students. The purpose of developing this skill is to capacitate ability to participate in deriving the best possible ROE. The meaning of market driven would be discussed in 'ISSUES' to set a background of employability along with global issues in youth's unemployment and as resolutions in few countries.

Instructive strategies would be in accordance to the instructor's own philosophical beliefs of instruction governed by learners' background, knowledge and experience, situation, and environment in addition to learning outcome. Therefore in this confine the learning outcome would be the

Financial Economics Specific Skill (FESS) ability with a market-driven pedagogy of combinatorial instructional methods to 1) consolidate prior leaning, 2) practice theories and 3) relate theories to practice. Expanding on Merton's Nobel Lecture [1] and Shape [2], FESS in the context of this paper would be money as a resource commodity that would be traded for higher expected future money value that meets ROE within acceptable informed risk level. The higher the desire expected future money, the greater would be the risks that have to be managed by eliminating uncertainties through reliable and confirmable good value information. Along this elimination process, one identifies options available to hedge against uncertain risk by diversifying money resources on hand to different asset classes, projects or products that would have more definite certainties to meet one's desired expected future money value.

## II. BACKGROUND

Regular transactional Company Relationship Management (CRM) on consultation with CPD partner companies suggested that trainability is the one single most important key factor which companies considered when deciding to absorb interns into regular employment[3]. The survey restricted discussions with companies to just two key questions. The first was how soon companies regarded an intern's understanding of business finance budgetary planning process because an acumen for money management like cash flow demonstrate a good feel of understanding fundamental risks concepts. The second was how soon an intern could demonstrate understanding of basic business economics as that would represent interns' ability to sense micro economy's direction.

A regular interview survey of 205 companies over 27 months from March 2008 by a CPD office depicted in Table 1, showed an eventual view of interns' employability which resulted from a progressive enrichment of existing pedagogy by redefining it with instructional strategies that met market's expectation of interns' critical thinking abilities. Over that period, pedagogy embraced enhancement through computer assisted learning for full engagement with consecutively linking of five tertiary course modules to make a complete whole. Hence, that study was responsiveness to market's needs for employable graduates.

Each of the 9 assessment periods in Table 1 was for 3 months for a total of 205 different interns. Companies were requested to score the importance they place on an intern's reasoning ability in associating cause-effect and work flow, both being key reasons for determining employability. The

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study was limited by different interns during each period. The survey took companies' advice to enhance employability with improvement in teaching method and enriching course modules to achieve learning of specific financial economics fundamental for responsive decision making. Evaluation of effectiveness in the survey was assessed by sighting reduced time in Issue-1 and Issue-2 in Table 1 which respectively displayed the average duration (in weeks) an intern was able to fluently discuss business budgetary process and economics related to the company's products.

The findings in Table 1 showed a progressive time reduction of interns' ability to fluently discuss business budgetary process from 10.92 weeks to 7.08 weeks. Over the observed period from March 2008 to December 2010 intern's fluency to discuss companies' related products have also improved with reduced average time from 10.67 weeks to 8.08[3]. The findings showed that graduates' employability had skewed positively towards a market-driven pedagogy that preferred self-directing employees quick in harnessing causal effect and workflow thinking skills. This demonstrated interns' effectiveness in conceptualization risk-aversion decision making because feedbacks from industries suggested interns be trained through an engagement delivery method that had emphasized critical thinking skill through continuous reminder of cause-effect and workflow in their training.

usage of cause-effect and work-flow teaching method with concept mapping techniques techniques to reinforce learning capacity had obviously improved knowledge retention ability and speed in recalling knowledge into practice [4] [5]. The logic in capacitating development of meaning was interlinked by diagrams, concepts and promptings became critical thinking routine which was ranked among the top five requirements by industries of university graduates [6]. As a result, employers' satisfaction of interns' productivity improved with each later batch of interns. The overall improvement was a result of listening to industries' advices to engage the two delivery methods in producing learning; cause-effect and work flow.

### III. ISSUES

#### A. Mismatched Pedagogy

The background of the preliminary study was very important to this paper because the continuous emphasis by industries was on work flow and cause-effect method of delivering training have seen improvement in interns and as a result, these two delivery methods driven from market requirement would extend into this paper as it indicated industries' needs for tertiary education pedagogy that must couples with industry. While identifying the difference between university and professional programs would be practice relevancy. Students enroll to graduate and practice and not to teach or train because it would require years of professional experience to know how to teach professional practices. Professional program lecturers such as accountancy or medicine would be drawn from certified practitioners. The other reason that there no university teaches how to teach financial economics or the likes of it could be insufficient people wanting such pedagogy as learning outcomes would be for professional practices. Nonetheless there would be relevant journals that invite sharing from best practices and the same goes to most professional courses.

"Malaysia needs an education system that is market-driven in order to produce work-ready graduates" according to a study by Curtin University [7] meaning graduates must possess attributes demanded by industries of which decision making and problem solving skills were among the top five expectations by companies [8]. Graduates were taught subjects that required them to reflect how to apply what critical thinking had taught as that would be the missing link to enhance employability.

New national educational issues in China have found grounds for greater debate for education reformation to address necessary sociological changes to traditional Chinese learning culture, the latest being to transform from student to teacher centered in the recent dialogue about spirit of higher education [9]. Interestingly that dialogue had not discussed industry centric education that led Germany and Japan from the ruins of World War II to become among today's leading advancing industry providers of methods and technologies Even smaller nations like Singapore propelled into first world status within thirty years with no natural resources. Surely their human capitals were responsible for their continuous drive for better education instructional system to reach

TABLE I: SUMMARY RESULTS OF SURVEY

Total 205 companies surveyed over 9 quarters	Issue-1 - Weeks for interns to discuss business budgetary process fluently									
	12	26	20	35	No survey	32	35	20	13	12
3 months per quarter	2008-Q3	2008-Q4	2009-Q1	2009-Q2		2009-Q4	2010-Q1	2010-Q2	2010-Q3	2010-Q4
total weeks companies identified $\sum fX$	Issue-1 - Weeks for interns to discuss business budgetary process fluently									
	131	286	217	351		302	297	171	98	85
$\mu = \sum fX / N$	10.9	11.0	10.9	10.0		9.4	8.5	8.6	7.5	7.1
total weeks companies identified $\sum fX$	Issue-2 - Weeks for interns to discuss fluently economics relate to company/product									
	128	292	214	355		307	329	179	105	97
$\mu = \sum fX / N$	10.67	11.23	10.7	10.14		9.594	9.4	8.95	8.077	8.083
companies total score this variable $\sum fX$	Number of respondents suggest to improve on work-flow teaching									
	52	114	90	155		146	159	87	60	53
$\mu = \sum fX / N$	4.3	4.4	4.3	4.6		4.6	4.5	4.4	4.6	4.4
companies total score this variable $\sum fX$	Number of respondents suggesting to improve cause-effect teaching									
	52	120	91	152		142	156	87	56	53
$\mu = \sum fX / N$	4.3	4.6	4.3	4.5		4.4	4.5	4.4	4.3	4.4

The findings in Table 1 also suggested that due to progressive enrichment of course modules and delivery method from listening to companies' advices to intensify

current national wealth according to the Father of Economics, Adam Smith's in "The Wealth of All Nation"[10]. Surely a nation's ability to produce more effective graduates make one tertiary education superior over another with graduates as proof that the products of an educational system would be graduates capabilities to meet industries' expectation which in turn enrich their nations!

In "Education Strategy 2020" [11], the re-emphasis on education's role in development economics from a system approach as its initial thrust for market driven skill in Egypt [12] to integrate education into economies. Implementing different pedagogy strategy by needs and capacity priorities were the World Bank Group's reasons for concerns in different eras and different regions. Whether its reactive or pro-active planning, the mismatched gap between what university produced and what industries needed can be estimated by time lag; the longer time taken to reconcile the gap would confirm the degree of unpreparedness.

Hartley's [13] "New pedagogy for new economy had similar calling, to the world back that unless pedagogy is responsive to new economy, education may depreciate human capital potential and disservice youth's investment for their future". Harley's response appeared to have met "The King's and Warwick Project" [14]. On the contrary, the mismatch between universities graduates and industries demand for appropriate skills continued [15]. Even with known on-going mismatching of graduates' abilities and industries' demand for appropriate skills, resolutions remained placid [15]. With collaborative dialogues between industries and universities, transactional differences may narrow the mismatched gap when universities listen to what industries' require [16] to construct pedagogies that leverage on youth's best years to produce functional graduates for industries. For that alone, transactional analysis as in CRM would be for universities to listen to the market i.e. industries, so that effective pedagogy would produce functional graduates for industries instead of wasting their best youth years at college. On this score, the U.K. government necessitated a revamp of its education policies for the 21<sup>st</sup> century [14] to address the needs not just in the UK but for many who have traditionally looked to the U.K. for advance education. Meanwhile few universities' bureaucratic process made things happened on their own just like Warwick University and Hong Kong Polytechnic University [17].

### *B. Demand for FESSs*

That IMF quoted China's economy would surpass the US by 2016[18] added challenges for increased off-shore ventures[19] [20]. China's outbound FDI increased from 2008 seems to have begun benefitting few [21] whereas China's increased domestic consumption, higher cost of production and delivery [22] and being nearer to buyers' markets were likely reasons for Chinese SMEs to relocate to more economical production regions, more so when the Yuan appreciated further. The reasons for increased outbound FDI could be expected to be quite similar to inbound FDI when the Yuan and labor cost were both cheap. Imminently the immediate response would be a demand for local graduates with relevant skill.

In addition, the Canton Fair statistics [23] demonstrated the fair's volume pulled back. By Fibonacci flush back

equation developed by Lim [24], a possible increase of the fair's business volume would be expected from May 2013. The projected increased would likely be from increased foreign exhibitors at the fair. The fair statistics was about concluded business volume, not just Chinese companies. Chang's [25] fundamental analysis that China would collapse would remain to be seen as Chang's had not discussed China's GNP growth nor considered China's trade structure had shifted in recent years [26]. Stepping up its internationalized effort [27] would be akin to outbound FDI of US and Japan during their globalization eras. That China would soon be a global economics leader makes it imminent for higher education reform to match economic leadership, and the escalation of demand for effective human capital would be better met by industry collaboration through CRM consultation on reckoning that exploring a market driven pedagogy of FESS with a tri-educational approach of this paper would aim to overcome employment slack in non-CPD based programs.

### *C. Impending Human Capital Shortage*

According to HKPU's survey [17], "some 57.1% of interviewees from industry said that the most worrisome aspect was the quality of human resources in the technology and management field" would signify lag time in matching curriculum to imminent human capital constraints. HKPU recognized these emerging needs of industries for new business skill and amalgamated two degrees to form an undergraduate degree in engineering and business in response to a study would show that the Pearl River Delta pans out into the lower region of Guangdong province would witness a continuous rise of high technology manufacturing activities. As manufacturing produces products that must meet markets' expectation of quality and affordability specification, the pedagogy for FESS would be imminent for these industries to stay relevant [28].

To emphasize the point, in late seventies, Lakehead University [29] mentioned in one of its faculty bulletin that a study by Canadian National estimated that some 50,000 MIS graduates would be required over the next 10 years. At that time, MIS was offered as a MBA major and the graduating rate of MIS was insufficient to meet forecasted demand, according to Relch [30]. As a result, Lakehead University known for its undergraduate teaching was chosen in 1980 to pioneer an undergraduate MIS transfer program. To produce its first batch of graduates in 1981, few undergraduates from computer science and accounting were approved transferred. Two students graduated from the new undergraduate MIS major in May 1981. If this Canadian case was to serve as an exemplary foresight, it would indeed be a referenced lesson to plan ahead before the need for specific human capital becomes a challenging issue.

### *D. Education for Employment*

In the midst of the current political turmoil surrounding Arab nations, a comprehensive report [31] from Arab youths' outcry for curriculum relevance to industries' need reinforced Jackson's [15] study which emphasized similar mismatches and that the relevance of education is measurable by their abilities to meet industries' demand. The Arab world reported "only one-third of the surveyed young people believed that their education prepared them adequately for

the job market, expressing strong doubts about the quality and relevance of their programs” [32]. Going beyond their oil wealth, Arab youth were pressing to hedge their future through relevant education for their nation’s future prosperity depends on its youth. What’s more of nations without natural wealth?

China had pointed that direction as well [33]. Did conventional process take too long for universities’ bureaucracy to effect responsive curriculum changes? This human capital developed from necessity to survive job market competition knowing that companies hire people for their existing capabilities [34] also confirmed that education for employment is a generic youth desire spanning from China to Arab nations. Governments must ensure that youth have the right skills for the jobs being created. In ‘Creating a 21<sup>st</sup> Century Curriculum’ [14] as opposed to ‘Are They Ready To Work’ [6], the former in the UK seems to be responding to the latter in the US as to redesign outdated curriculum to better address global changing needs. According to OECD employment outlook 2011, where unemployment had risen, youth was among the hardest hit and prolonged unemployment will depreciate their overall value and self-esteem [35]. OECD attributed the problem as structural arising from various factors, one that is crucial is the imminent need to “reducing skills mismatch with greater responsiveness of education systems to changing skill needs and a strengthening of educational choice through, for example, better opportunities for vocational education and training” [35].

An important element of youths’ development is decision making leadership and a study had [5] highlighted an overwhelming majority of CEO rated 81.8 per cent for leadership being “very important” for new entrants with a four-year college diploma. The gap closing effort from a preliminary study result of Table 1 had resulted in relatively successful module redevelopment after a series of iterative analysis and design to achieve learning of only some FESS for responsive decision making [3]. The concerns of youth and few responsive governments from Arab nations, China, USA and UK are pointing towards structural functionalism pedagogies capable of seamlessly integrating youth into societal structural functionalism.

#### IV. PEDAGOGY REVIEW

- Mofett, Stonehill and Eiteman [36] described their “Fundamentals of Multinational Finance” pedagogical tools as writing style that would invite good reads, lots of illustration and exhibits, a running case, mini cases at the end of each chapter with information of contemporary practices of global finances, questions and answers. Being among the most recent textbook out in multinational finance, whether it would sustain readership for the financial turbulence happening now in Europe, time would tell as even ‘The 2008 financial crisis and economic pedagogy’ [37] was outdated by Greece’s maturing debts in 2010.
- According to Hens and Rieger [38], finance would be composed of many different topics. Financial economics would be the connection between finance and economics meaning there would be potential confusion for

misunderstanding into the various streams of finance and economics.

- Goldstein and Onyeiwu [39] suggested that in rapid changing global economy, pedagogy with case studies and experiential learning would be better off with added exposure of recent global deficiencies to add onto a curriculum’s comprehensiveness.
- The ‘Hook’ by Burney, Marcis and Boyles [40] referred to an element of capturing interest that cause learners willing to stay on to listen, suggested that within the pedagogical breaking down of a teaching module into topics, the topic on hand should be so well positioned to create the maximum impact capable to engage learners.
- The approach by Duett, Merikas and Tsiritakis [41] to link operating and financial leverage to systematic risk would be done by decomposing the firm’s balance sheet and in so doing would identify better what each type of risk would be borne in order to re-appropriate assets to the correct portfolio.
- Bohren [42] use the logic of the market model to offer a simple framework for presenting the basic risk concepts in an integrated way because according to him the concepts of finances though not difficult to communicate when they were taught one at a time. However when these concepts were taught on an interlinked basis, it could be very difficult for students to follow the internal relationship within these concepts because there was no framework for such unison. He therefore he suggested a building block structure for teaching risk in modern finance.
- A survey of price discrimination by Marsden and Sibly [43] about the teaching of price discrimination in 5 textbooks found no attempt to link the rational of the three types of prices discrimination and therefore their study had described taxonomy to teach the matter.
- In Austrian economics and pedagogy, Loan [44] suggested that under the principles of liberty, students as independent learners would center themselves upon their individual self as an organism that could only grow while when they could discover how they learn.
- The employment of concept mapping for finance had been wide according to few regular writers promoting this aspects of illustrative active thinking such as Biktimirov and Nilson [45-47], Filbeck and Smith [48], Mento, Martinell and Jones [49] and Nettleship [50].
- Needles, Powers and Crosson [51] said their ‘Principles of Accounting’ had its design originated the pedagogical system of integrated learning objectives, a system that purported supported both learning and teaching by providing flexibility in support of the instructor’s teaching of first year accounting with review and assignments at the end of each chapter to identify learning objectives which in turn referred to specific content areas by a ‘Stop and Apply’ section to reflect with an exercise.
- Abraham compared delivery of accounting subject with the blended learning approach versus the traditional approach. It was claimed that “the significant improvements in every area, supply valuable evidence that the adoption of a blended approach in higher education would appreciably enhance students’ results

and experience by providing a more student-centered learning environment” [52].

- Milne and McConnel [53] suggested problem-based learning using case material in accounting education which outlined the learning logic with reviews of empirical evidence to develop self-directed learning behaviors to bridge theory and practice.
- Many accounting textbooks exhibited diagrams as standard inclusion to illustrate the flow of numbers from one process to another. Although Leaby and Brazina [54] illustrated their support of using concept mapping in accounting but more can be done with colors within the usage of Excel to enhance live visualization.
- Motivated by findings in their research, the D’Souza and Kelwyn [55] of ‘Factors influencing student performance in the introductory management science course’, suggested that further investigation may be necessary to understand the root causes of poor performance and recommended corrective measure to improve students’ performance in the management science course due to reasons ranging from students’ lack of preparation to ineffective course design.
- Graphs would be natural integral aspects in decision making courses so are grids but the way illustration presents these concept perhaps might enhance understanding as pointed out in by Schau and Mattern [56] in “Use of Map Techniques in Teaching Applied Statistics Courses.” and by Sirias [57] in ‘Using Graphic Organizers to Improve the Teaching of Business Statistics.’. Tukey [58] had suggested that for both qualitative and quantitative analysis, the over reliance of numbers might cause one to be myopic in analysis by missing out the bigger aspect of what might suspiciously be drawing close to issues under discussions.

## V. FINANCIAL ECONOMICS SPECIFICS SKILL PEDAGOGY

As financing projects became competitively market driven, advance skills have to emerge from the combinatorial generic fundamentals of financial economics towards sub-specialization in the industry specifics and in the process motivate job market expansion for multi-skilling abilities that would be more effective in translating opportunities into higher net value, according to Vitaro [59]. While not everybody desire to attain FESS, those who desire to progress to the CEO/CFO/ or MD/ED/Non-ED positions with existing formal tertiary training, inclination to business development and who knows about the company’s products and their markets, and how they can be funded, can enhance their self-worth with market driven pedagogy for FESS. A person with C or D level responsibility would have to coexist between marketing, manufacturing/production and finance. By that, FESS would be an indispensable auxiliary skill for fiduciary duties.

As a result, FESS would become an imminent skill set for decision making that affects final pricing in enhancing corporate future value. Formal financial economics knowledge might be acquired through postgraduate studies whose curriculum train postgraduate students towards making advance financial economics decision making[60].

However few would have the time luxury to return to school for two years and many successful C or D level people have other avenues to develop themselves. A person with formal pre-exist accounting, finance or economics skills might be better motivated towards this advancement because of the knowledge foundation which they would hold to prove themselves in the industry wherein the element of specific experience would serve to consolidate their theoretical knowledge. Given that formal knowledge of FESS is desirable to enrich C and D levels, this paper would establish the evidences of impending shortages of FESS addressing the divide of what industry wants that universities have not produce.

### A. FESS capstone

One of the two capstone discoveries protruded this paper i.e. the Eyx elasticity factor by Lim [24]. Characteristics of two classical theories specific for the FESS pedagogy knowledge content were found in accounting break-even and economic equilibrium. The basic reasons for these two simple concepts were that they were used daily but having a purposive pedagogy to guide them in consolidating prior learning would enlighten understanding. The financial accounting break-even BE means in simplicity a square position of no gain and no loss[61]. The layman understanding is; what is the lowest cost to bear without losing one's own money before even considering making a profit. This establishes the thinking of ‘bottom’ or base level. The next classical theory is Economic Equilibrium or EE [62]. In explaining this, the simplest layman example is ‘willing buyer, willing seller’ i.e. a market. It means there are transactions to materialize when there are buyers and sellers for whatever good or services in any form, because they include the most important element i.e. an agreed price, or the maximum that a buyer will pay and the lowest a seller will accept, and therefore the name equilibrium where the demand of buyers at the price meets the sellers’ ability to supply at the same price. This would establish a ‘top’ or a ceiling to the buyer that either the item could be sold at this top price that the buyer is willing to pay or the item stays unsold.

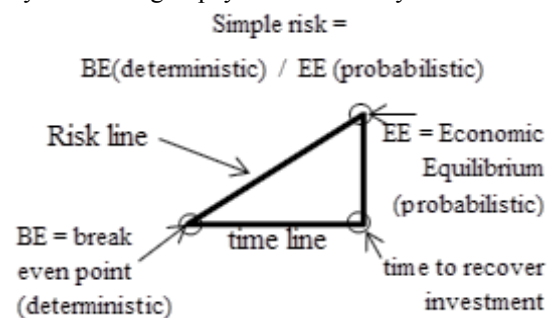


Fig. 1. FESS content.

Fig 1 would depicts the core knowledge content of FESS as Break-Even Economics-Equilibrium which is the tangent triangle of BE and EE. The hypotenuse being the distance between BE and EE represents incremental risk from BE to EE and need decision management skill. BE is deterministic while EE is probabilistic. The adjacent line represents time to arrive at the expected ROE. With these two merging of specific financial theory and economic theory, the establishment of a bottom and a top, two simple basic points would form to connect with a line known as the BEEE line. It

remained puzzling why basic economic module or accounting module doesn't teach simplicity of merging these two theories even in their advance modules. The line distance would mitigation the process or flexibility to conclude a price until the flexibility stops. In economic language this process is call elasticity. This mitigation process is the capstone thinking when it becomes intricate in estimating BEEE elasticity according to Lim [24]. The onus between deterministic BE and probability EE is their distance representing risk to be managed thorough diversification or hedge in the event the project falls short of EE and cannot meet expected returns. From this simple layman thinking, the training would take on a higher level because it would involve managing risk in making investment decisions.

The BEEE elastic factor  $E_{yx}$  would offer a simple way at looking at the magnitude of change in various scenarios mentioned because it would demonstrate the combinatorial effects of both BE and EE points while factoring risk premium onto the efficient frontier.  $E_{yx}$  being the measurement of elasticity provide the indication as to where and when risks premium were to be diversified. While  $E_{yx}$  provides a guide as to what would be the limited working capital investment to reap hypothetical revenue.

Decision making involves understanding risks and the information to manage those risks which involves formal quantitative abilities to optimize realizable return through abilities to marginalize risks and diversify resources. Combining BE and EE became the capstone equation  $E_{yx}$  by Lim [24] wherein EE is the maximum returns obtainable form best information available to ascertain the most possible peak price. Hence  $EE - BE = \text{profit, ROI or ROE}$ , depending on the context of the application.

The three element of this tangent; BE, EE and hypotenuse require basic tertiary knowledge of finance, economics and statistics, hence only senior students with at least two of these three fundamental knowledge qualify for FESS training which include CPD and WIDE. Training to consolidate pre-exist knowledge include constructive elements of workshops, seminars, concept mapping skill and case studies.

#### *B. Command words and Assessment*

Analysis of command words used in recent 12 unpublished past exam Papers of an accounting body in recent 2 years by Hughes [63] resulted in a summarized count that had 'advise' appeared 10 times. The syllabus topic of a Professional apart Part 2 Financial Accounting examinations required competency that include being comprehensive, critical in evaluating data to reflect detailed specialised knowledge and capability of acting independently and effectively as a professional. Paring this to FESS, the equivalent would be along with Professional Level 2.

#### *C. Analysis to Frame the FESS Pedagogy*

The issues mentioned point to a multi-layer problem of pedagogy relevancy. Governments would be accountable for their GDP growth that would come from human capitals which in turn would be produced by higher educational systems. "Where the limits of universities lie and where industry must pick up the reins where great science literacy is needed" according to Gomory & Shapiro [64]. This would relate to the imminence of universities/colleges to stay relevant through continuous action oriented dialogues with

industries to close the gap of mismatched pedagogy and program irrelevancy for economies to stay competitive as shifts in an economics structure would create lag time for universities to develop the right human capital in today's fast changing world economy patterns. Macro perspective of frustration for employable education would complement the mismatch pedagogy mentioned and reflect more outcries that would yet be heard. Attempts relating pedagogy in various context offered islands of resolutions that at best would be reflected in the dual educational system of Germany/Austria which combined practice to theories as investors are known to highly favor specialized skills that the US talked about [65].

FESS pedagogy development by universities could easily be superseded by fundamental programs which focus on macro priorities such as standard tertiary major like business studies, engineering or accountancy. Graduates could gain two years of direct work experience before they would be considered for career advancement. Tertiary institutions' obligation therefore would train students from base zero. A search for financial economics undergraduate course in the U.K. showed at best, joint majors of economics and accountancy [66]. A reason for public universities and colleges for not responding to the need for new skills would be their non-autonomous decision processthat Ministry of Higher Education (MOHE) would decide which university would best account to lead new initiative such as mentioned afore in the Canadian National case which Canada's MOHE chose Lakehead University [67]to pioneer a Management System transfer program. The governance of accountability was not to be seen as weakness for low response but a conservative national human capital development approach. Therefore efforts by professional bodies such as by ICAEW might have been more efficient with offering of short programs to overcome skill shortages.

#### *D. Scalable Tri-educational System*

From a different angle, the discussion and argument so far illustrated a case for a scalable tri-educational system which would enhance the dual education system with a work-integrated-dissertation. By being scalable, it would allow for different values, in and beyond different societies to adjust the intensity of each of the three systems within the program. The difference between internship, co-op program, dual educational system of Germany/Austria, ICAEW's CPD system and a scalable tri-educational system would be the three systems concurrent operation which inter-links WIDE, CPD and constructive training. A work based dissertation would connect theories to CPD practice whereas the training would provide the methods and concepts to consolidate pre-exist knowledge. Just as in the CPD of professional programs which resulted in almost full employability rate because students' CPD seamlessly integrate into their careers, therefore the tri-educational system would have s similar objective.

To enhance employability, selective university programs that operate without CPD would adapt few sources into a localized practice in the tri-educational system that would adapt CPD practices from an accountancy body, work integration from Germany/Austria dual education system and WIDE which would require a work based dissertation to

condition theoretical understanding.

In this scalable tri-education system, all three systems would operate concurrently to form a complete pedagogy that all three systems check one another, and while doing so would achieve a comprehensive consolidation of prior learning with FESS content, WIDE and CPD with an aim to solidify total worthiness of specific senior students in the program as another mean to further narrow unemployment and to enhance career advancement. The scalable element suggest that some degree of flexibility that industries would accept e.g. between 12 to 15 months inclusive of CPD practices to consolidate learning.

#### VI. CPD TO CONSOLIDATE LEARNING WITH PRACTICE

Unlike professional programs like medical, law, accountancy and some engineering whose professional bodies bridge their career with a watchful CPD. Liberal arts programs such as finance do not have CPD arrangement. This missing link to consolidate graduates pre-exist knowledge with practices contributes to graduates' lack of knowledge/skill of decision making among students in economics, finance and quantitative methods at tertiary level. From previous sections, the call for market-driven pedagogy is boldly emphasized for responsive employment economics that befits youth's desire to sustain their self-worth rather than permeate frustration through social e-commerce. While far-fetched pro-active strategies are needed to further narrow unemployment, sustaining values of learning and career prospects with eliminators of youth's predicaments of rights to jobs, sustain knowledge worthiness and shoring human capital shortage with specific pedagogy for FESS with decision making governance that encompasses a localizable best practice CPD within WIDE would be that important interlink phase not mentioned by the said issues and resolutions. This missing link is the consolidation phase. Continuous professional development (CPD) would be a mandatory pedagogy requirement in any professional program to bridge senior year student into the industrial world. In contrast with internship and co-op program, the CPD process would involve tracking professional practices and mandatory workshops directly related to the practices updates example tax reform, legislation in accounting reporting and new accounting standards. The problem of lack of knowledge/skill of decision making among students in economics, finance and quantitative methods at tertiary level would be the missing link to consolidate pre-exist knowledge with practices.

Without this link, knowledge will depreciate. While curriculum configures knowledge development process like an assembly processes where each part logically connects to another to make a whole, there was no mentioned of how these cumulated knowledge would be tested on actual practices although case teaching would be the closest critical thinking next to reality, bridge theories with the real world [68] [53]. By Deming's [69] 'Plan, Do, Check, Act', definition, case based pedagogy stops before the 'Act' stage. Practicing knowledge through CPD not only connects theories with practice, it would also directly engage graduates into their careers.

A CPD within a WIDE would complete the PDCA cycle as a low risk approach for a specific pedagogy in those said

resolutions of apprenticing, valuing multi-pathway, curriculum revision and transfer programs. The argument here suggested that curriculum relevancy would be a symptom of slacks in decision making knowledge skill among seniors in economics and finance. Curriculum would become a problem identity only when industry rejects the graduates. Unless there could be CRM between universities and industries, curriculum relevancy would not be ascertainable, again confirming that market driven element for a pedagogy construct could be more effectively organized into universities core curriculum, where FESS would expound positive impacts.

The call for market-driven pedagogy would boldly emphasize for responsive employment economics that befits youth's desire to sustain their self-worth rather than permeate frustration through social e-commerce. While far-fetched pro-active strategies would be needed to further narrow unemployment, sustaining values of learning and career prospects with eliminators of youth's predicaments of rights to jobs, sustain knowledge worthiness and shoring human capital shortage with specific pedagogy for FESS with decision making governance that encompasses a localizable best practice CPD within WIDE would be that important interlink phase not mentioned by the said issues and resolutions. This missing link is the consolidation phase at CPD.

ICAEW's RAID [70] model would require members to declare statement of compliance. Members would self-supervise journalizing their practices that declare CPD time and wrongful declaration would result in those validated period nullified. The ICAEW CPD would have both constructivism element of continuous evaluation with punitive behavioral element to enable self-supervision. Hardly is there an accountant without a job because the CPD element would have already link the graduate although there would be little extrinsic in the start-up stage of the career, therefore for the issues related to the problem statement, the CPD pathway would be a proven linkage to employment for any professional programs. Unemployment arise when students undertake programs that would be not demand driven and hence they would become mismatch to society's structural function e.g. a degree in fine arts majoring in sculpture or portrait painting.

#### VII. POINT OF ENTRY INTO FESS

FESS being a tradable money resource for increased ROE within optimized risks from reliable high value information and diversification options would response to three high value questions: what could be the known opportunities presented, what money quantum would be needed and when would be the time expected of ROI. To improve employment prospects of finance and economics graduates and have them progress earlier to higher value C and D positions of enhanced corporate governance, therefore the market-driven pedagogy for FESS would operationalize as the essential skills from a composite of pre-exist knowledge in finance, economics and quantitative methods that qualify a senior tertiary student into a FESS program.

An indication among senior professional accountancy students who transferred to a program that offered CPD within WIDE is a key driver to explore changes in youths'

decision as seen in >70% of selective students interviewed have decided to advance to a transfer program that is FESS bias because of the pedagogy aspects which focus on consolidating pre-exist knowledge through a WIDE program during which the college and its CPD center jointly monitor students' CPD progress [3]. The >70% interviewees in favor of WIDE program was significant to conclude that not everyone who study accountancy desire to practice accountancy just as in the eighties when Lakehead University presented the MIS transfer program opportunity.

Variables expected in this paper would be abilities of FESS students, FESS content, WIDE and CPD companies' assessment. The FESS contents would include several items that as compositely would be responsible to consolidate prior learning. These items would involve methods, procedure, concepts and motivators for teaching, learning, retaining and recalling knowledge. The framework would find support in best practices in CPD, work based dissertation, and the constructivism aspects of methods and procedures that enhances knowledge retention and retrieval CPD would become one of the pedagogy enabler and a link between industry and universities through continuous CRM to narrow the unemployment gap, promote structural functionalism, enable motivational influences that cause pedagogy's relevancy to meet the needs of those who employ and those who want to get employed. In order to identify theories related practice, the two main independent variables of behaviorism and constructivism aspects of learning and training, the types of motivation factors link through intrinsic and extrinsic influences can measure within defined delimiters.

#### VIII. SOME RESOLUTIONS IN EMPLOYABILITY

The U.K. government necessitated a revamp of its education policies for the 21<sup>st</sup> century [14] to address the needs not just in the UK but for many who have traditionally looked to the U.K. for advance education. Meanwhile, this exemplary initiative might have motivate other universities throughout the world to pursue similar initiatives to avoid issues discussed in the following sections and in doing so narrow the gap of pedagogy mismatch between what universities' produce and what industries' need.

Darch [71] mentioning of co-op programs as an option to sustain youth's employment prospect is a possible alternative to transit youth from class to workplace and in so doing, sustain their knowledge's value.

The non-government instrumented findings initiated by Hong Kong Poly Univ.[14] for work integrated education and new curriculum development with Warwick Univ.,as one that seemed most timely matched to the changes in employment economics to meet market demand. HKPU's idea of work integrated education had seamless integration of graduates into industries' skill gaps [72].Two OECD reports suggested incorporating vocational education training [73] to increase youth's employability[74].

One of the effects of Germany's reunification was to reconcile previous education system with a dual educational system that would combine both practical work and theories at three levels of graduates from age 16 to 19 [75] that saw the progress of Germany being the firmest economy among EU members[76].While acknowledging success of the two

OECD reports and Germany/Austria dual-educational system, the continuation of US classroom-based pedagogy would at best produce negligible gains according to a study by the Harvard School of Graduate which advocated a three point development strategy to rescue America's education system that had failed its youth: 1) a broader vision of school reform with multiple pathways from high school onwards. 2) Expanded role for employers to partner new pathways. 3) New social compact between society and youth Education [77]. The one powerful finding keyword by OECD and Harvard School of Graduate Education was 'engagement' with employers and industry meaning listen to the market, for it was accountable to bring in the GDP number. This analysis was suggested by transactional analysis of CRM in the earlier part of this paper.

Professional programs have their CPD that operated quite like Germany/Austria dual educational system with varying due diligence in regulating their individual CPD compliance.

Wecker [78] in '10 National Universities Producing the Most Interns' found that the current practice of internship was to supplement students' coursework which Black [79] affirmed that students with internship experience would be preferred for employment. To overcome skill shortages, some universities required some of their non-business graduates to take a short course in entrepreneurship together with internship before they graduate [80]. However there remained insufficient effort to sustain intensity when tertiary institutions needed to maintain a time consuming CRM with industries to interlink with CPD development. CRM in the form of one-to-one dialogues, forums and continuous survey of skill requirements keeps industries inform of the demand and supply lag time.

#### IX. CONCLUDING REMARKS

With emerging new financial economics knowledge from global events giving rise to new economics and financing opportunities at increasing speed of advancing delivery mechanism, augment well for imminent pedagogies upgrading as is relative to changes in structural economic that even previous studies such as by HKPU could at best managed to offer pockets of focused. As a result the gaps in 'pedagogy mismatch industry', impending human shortages and employment imbalance showed would continue to widen due to the time lag factor in providing timely resolution and this had expand research opportunities to help narrow this gap.

This paper would not provide a comprehensive solution to 'save the world'. It would explore pre-emptive university graduates employability by seizing research opportunities present to narrow the problem gap with a framework of a tri-educational system in FESS for students in finance and economics to develop their cognitive approaches to receive, filter the overloaded information and consolidate selective ones in constructively retainable and faster retrieval manner for competitive decision making in financial economics within their CPD practices and as a result enhances their employability. The significances of this paper's exploratory finding would be:

- Raise human capital value by being another source to narrow the employment gap between what industry wants and what universities could not meet.



- Beginning with the end in sight, this concise pedagogy driven by market needs for graduates with decision making ability, is constructed to assist seniors to consolidate their pre-exist knowledge content in business economics, finance and quantitative methods that together with CPD and WIDE to enrich their making decisions abilities to achieve higher employability.
- A compressed concurrent tri-educational system offers integration for senior students into their career start up can immediate raise human capital value and narrow the employment gap between what industry wants and what universities could not meet.
- Improve possibilities of potential C and D level earlier as well as entrepreneurship due to less effort needed to discover learning by longer route hard way and be better prepared to seize entrepreneurship opportunities when they arise [81] [82].
- Provide a pedagogic reference for universities to adapt by conducting seminars and training clinics to share knowledge and practices.
- Enlarge and enrich a renewed definition of pedagogy by disseminating its knowledge, experiences and practices through appropriate publications.

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