

1 Review on Graduates' Unemployment in Sri Lanka and the 2 Globe

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6

7 **Abstract**

8 Graduate employability is a key concept in political, economic and social discourse. There is no
9 generally accepted definition of graduate employability. In this regard, researcher critically
10 review the graduates' unemployment in the Sri Lankan and the Global context. Extensive
11 review strains to focalize on the factors influencing graduate unemployment such as skill
12 mismatch, education mismatch. In addition with the general factors, the lack of coordination
13 and cooperation among the various stakeholders of universities become a root cause for
14 unemployment.

15

16 **Index terms**— graduate unemployment, university, attitudes and skills.

17 **1 Introduction**

18 Policy makers in the private and State sectors have realized the contribution made by universities in regional
19 and national economic development due to the growing importance of a knowledge-based industry. Despite
20 initiatives taken by universities and government, graduate unemployment is a major problem of public policy in
21 Sri Lanka and elsewhere (Pinikahana, 2011). Therefore, this paper reviews the literature pertaining to graduate
22 unemployment, the attributes of graduates, and the reasons for graduate unemployment across the globe.

23 Universities all around the world are becoming concerned about their graduates' skills and the qualities which
24 are essential to make them productive citizens in their societies (Barrie, 2007). In the USA, UK, and Australia,
25 the increasingly vocational role of universities has led the governments and businesses to pressurize universities to
26 ensure that their graduates are both employable and professional (Green, et al., 2010). Hence, the current global
27 business environment emphasizes the importance of education for employability, focusing on the development
28 of key skills and experience which is only possible through the proper coordination and cooperation between
29 university and the industries. Although producing employable graduates is the main function of universities,
30 nearly 40 percent of graduates in the world are unemployed or are looking for jobs more than six months after
31 graduate.

32 **2 II.**

33 **3 Unemployment in Sri Lankan Sates Universities**

34 The unemployment rates among the Sri Lankan graduates are high, compared to developing countries such as
35 Singapore, Malaysia and Thailand (Wickramasinghe, 2010). Moreover, the average overall employability ratio of
36 Universities in Sri Lanka is 54% (Nawaratne, 2012). The Faculties of Arts and Management have higher rates
37 of unemployment in the country and accounted for 76% and 36% of unemployed graduates respectively, whereas
38 Medicine and Engineering accounted for 10% and 7% respectively in 2012. It has been repeatedly noted in the
39 literature that Sri Lankan Universities, are far behind, compared with developed and even in some developing
40 countries (Wickramasinghe, 2010).

41 This study has sought to answer the research question as to why the Faculties of Sri Lankan State universities
42 continue to produce graduates who find it hard to obtain jobs in the employment market. Problems regarding

6 REASONS FOR UNEMPLOYMENT

43 unemployed and underemployed graduates in Sri Lanka are not a new phenomenon, which has been reported since
44 the academic year 1959/60. The first batch of unemployed graduates was recruited as Development Assistants
45 by the United Front Government in 1970. The last batch of unemployed university graduates was recruited by
46 the previous regime in 2012. Unfortunately, after four decades, the products of local universities are continuously
47 employed mostly within the State sector. While the first batch of recruits comprised a few thousand graduates,
48 the last batch has exceeded 50,000 unemployed graduates. Even today, unemployed graduates are continuously
49 picketing and demanding the government to recruit them in different parts of the country. Therefore, graduate
50 unemployment is a chronic socio-economic problem that has become worse over time.

51 4 III.

52 5 Conceptualizing Graduates Employability and Unemployabil- 53 ity

54 Graduate employability is a key concept in political, economic and social discourse. There is no generally
55 accepted definition of graduate employability. Nanayakkara (1998) defines it as follows: "Employed persons are
56 all household members who during the reference period have performed some work for a wage P measuring the
57 'current' status of employment), he/she is defined as an 'employee'.

58 Employability is defined as the ability to acquire a job and to carry out the duties pertaining to the job
59 effectively to the satisfaction and benefit of one's self, the employer and the society at large. (Perera, and
60 Perera, 2009). Employability is also defined as the ability of an individual to gain employment appropriate to
61 his/her educational standard. Yorke and Knight (2004) define employability as "a set of achievements/skills,
62 understanding and personal attributes that make graduates more likely to gain employment and be successful
63 in their chosen occupations, which benefit themselves, the workforce, the community and the economy."
64 Employability was further defined by the University of Exeter as the establishment of clear mechanisms by
65 which students can develop their ability to use and deploy a wide range of skills and opportunities to enhance
66 their own academic learning and enable them to become more employable (Lee, 2000). According to the views
67 of another set of researchers, employability is now largely looked upon as an 'attribute' covering a spectrum
68 of meanings such as 'getting a graduate a job' and being a 'product of skilful career planning and interview
69 techniques' ??Yorke& Knight, 2004). In fact, employability skills are considered the skills required by almost
70 everyone to do almost any job, 'skills that make specific knowledge and technical skills fully productive' (Watts,
71 2006). Being employed means having a job, being employable means having the quality needed to obtain and
72 maintain employment and progress in the workplace.

73 The concept of graduate employability developed by Yorke & Knight (2004) is widely used by different
74 researchers. According to Yorke, graduates employability is a set of achievements, skills, understandings and
75 personal attributes that make graduates more likely to gain employment and be successful in their chosen
76 occupations, which benefits themselves, the workforce, the community and the economy. This definition is
77 very appropriate for this study as well.

78 Meanwhile unemployment is defined as the total lack of employment (here engagement below one hour
79 during the reference period is the total lack of employment as defined by ??Nanayakkara & Nanayakkara2004).
80 Unemployed graduates have been defined by the International Labour Organization as "those who are
81 underemployed or unemployed and looking for jobs after graduation for a period of time" (Labour Force Surveys,
82 2013). Another definition of unemployment is that "the unemployed are only those individuals who did not work
83 in the week preceding the survey and declared that they would be willing to take "any job", meaning by that
84 either a full-time job or a parttime job" (Sri Lanka Labour Survey, 2010). Therefore, the present study adopts
85 the definition of unemployed graduates given by the Sri Lanka Labour Force Survey. The context of the present
86 study, "unemployed graduate" refers to a graduate who is waiting to get a suitable job for his/her qualifications
87 currently being without a job or underemployed.

88 The existing literature suggests that there are three key elements of employability: the ability to (a) gain initial
89 employment, (b) maintain employment and make transitions between jobs and roles within the same organisation
90 to meet new job requirements, and (c) obtain new employment, if required, by being independent in the labour
91 market and being able to manage employment transitions between organisations (Athula, 2011).

92 IV.

93 6 Reasons for Unemployment

94 Most contemporary research has highlighted that the skills of educated youth, especially those of Sri Lankan
95 graduates, are not suited to private sector employment opportunities and private sector job requirements .
96 Another set of researchers believes that, although the economy has employment opportunities, for some job
97 categories, since seekers are not adequately found and for majority of the other jobs that are available, job seekers
98 do not have the necessary skills ??Gunatilaka, 1989;Dickens & Lang, 1996;Rodrigo, 1994;Kelly, 1994;Chandrasiri,
99 2008). Accordingly, the answers to the pertinent question "reasons for unemployment" are skills mismatch and
100 education mismatch.

101 V.

102 7 Skills Mismatch

103 The work readiness of higher education graduates is a concern for governments, higher education providers and
104 graduate employers. (Rose, 2013).

105 The existing literature mentions that the skills required by the employer are different from those the graduates
106 possess. According to the study conducted by Nawaratne, (2012) and Nanayakkra (1998), there is a mismatch
107 between employers' expectations and the quality of graduates. Therefore, there is a need to match the skills of
108 graduates with the needs of industry. Graduates should develop not only skills, but also practical experience.
109 Graduates would have a competitive advantage where universities incorporate employability skills in their
110 curricula.

111 Another study was conducted by Herath (2009) on the employability of graduates within the Sri Lankan
112 context. According to her findings, while the level of satisfaction of employers with business graduates is relatively
113 low, especially regarding their soft skills, as she further pointed out, Sri Lankan business graduates should have
114 both academic and professional qualifications, along with soft skills, in order to meet employer satisfaction. There
115 is a gap between the existing skills of the graduate and the skills expected by the employer (Ariyawansa, 2008).
116 This clearly explains that skill mismatch in the country is an issue involving the supply of graduates-i.e the
117 University. However, ??enarath (2006) has revealed that the university education system has now geared itself
118 better towards skills development.

119 Previous research that clearly indicates a lack of employability skills among the graduate and mismatch between
120 the skill levels of graduates and the expectations of their employers towards graduates. Another research study
121 focused on employability skills which are defined as: communication, interpersonal, teamwork, problem solving,
122 research and analytical, planning and organizing, technology, and lifelong learning skills (Bilsland et al., 2014).

123 Skills mismatch as identified by the previous study conducted by the Central Bank of Sri Lanka and other
124 researchers, also reveal there is a gap between the skill requirements for entry level graduate employment
125 and the skill level possessed by the entry level graduate (job applicants) (Central Bank of Sri Lanka, 2003;
126 Ranasinghe, 1992;Davison, 1993). These studies further support the view that a proper supply of skilled
127 employable graduates is essential for national, economic and social wellbeing whereas the failure to imbue young
128 people with employability skills has far reaching negative consequences (Central Bank of Sri Lanka, 2003). It
129 is also argued that providing young people with essential employability skills is an ethical responsibility of each
130 university.

131 Recent experience reveals that even talented graduates have to wait for a long time to obtain employment
132 after graduation. Some graduates, including Management graduates, have been waiting to gain employment from
133 government recruitment schemes for several months (Wickramarachchi, 2008). Many of the graduates, having
134 passed out, obtain a degree certificate, which does not help them to find suitable employment. Even though one
135 of the main objectives of university education is to improve the skills of students to face challenges in society, they
136 are forced to leave the university without having sufficient selfconfidence and assurance of better employment
137 (De Silva &Pownall,2014). Under these circumstances, graduate unemployment has become a severe problem
138 in Sri Lanka during the last few decades (Ariyawansa, 2008). Swiatek (2000) found there are differences in the
139 importance given to employability skills by graduates and employers. However, the researcher highlighted that
140 regarding the Sri Lankan university education system is that universities are not producing suitable graduates,
141 especially in the areas of Social Sciences and Management. Since the economy has been unable to absorb graduates
142 into the development process smoothly during the last few decades, the government found it was necessary to
143 implement special massive recruitment schemes (Wickramarachchi, 2008). The general attitude of educationists,
144 as well as employers, is that the economic system of the country has not been able to absorb its graduates into
145 the development process of the country because of the limited relevance of curricula and lack of quality of degree
146 programs. This situation is especially evident among graduates of Social Sciences and Humanities, and even
147 some Management graduates.

148 According to the views of the private sector, the mismatch is primarily due to the problems of the educational
149 structure, quality and content of the educational system, and particularly because the university system has failed
150 to provide the required skills, aptitudes, and job orientation for the graduate workforce (Amarasinghe, 1996).
151 Stated in brief, the previous research uncovered the reason for graduate unemployment or underemployment
152 as being a mismatch between the aspirations of graduates and the employment opportunities available to them
153 (Wickramasinghe, 2010). High rates of unemployment and underemployment among university graduates point
154 to a mismatch between supply and demand conditions for graduate employment, reflecting a supply Year 2017

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156 driven education system with little relevance to labour market conditions (Ariyawansa, 2008: Wickrama-
157 rachchi, 2008). Further, Weligamage and Siengthai (2003) made the point that skill mismatch leads to a large
158 number of unemployable graduates in the Sri Lankan economy.

159 The majority of graduates prefers to obtain white colour jobs, but these jobs are comparatively limited in small
160 and medium level organizations. Therefore, this reflects negativity or limited job opportunities for graduates,
161 since university graduates are finding it difficult to find job opportunities after graduation.

162 Unemployment among the graduates is seen in many countries, including industrialized countries. Previous
163 researchers, particularly in the developed countries such as the USA, UK and Europe, have found that job-

164 educational mismatch (education mismatch) is a more prominent problem among graduates than skill mismatch
165 or skill gap(Allen& Van-der-Velden, 2001; Di Pietro & Urwin, 2006) VI.

166 8 Education Mismatch

167 'Education Mismatch' is another dimension of skills mismatch. When a person is educationally mismatched, he
168 or she will be unable to utilize the skills acquired through learning and also unable to gain real output from
169 the investment made on the education (Green & McIntosh, 2007). Vertical mismatch occurs when the level of
170 education that an individual has is not suitable for his/her job. Vertical mismatch can occur in two ways, over
171 education or under-education. Over education exists when an individual is recruited for a job which requires a
172 lower level of education than that possessed by the individual. On the other hand, under education exists where
173 the individual has a lower level of education than that expected for the job. The logical end result of vertical
174 mismatch is either the presence of over educated workers who bring skills in excess of the skills required for
175 that job, or under-educated workers, whose skills are inferior compared to those required for that particular job.
176 According to Cedefop (2010), both these situations may result in negative consequences for the job market.

177 Senarath (2012) and Senarath & Patabendige (2012) have found that the formal economy in Sri Lanka (public
178 sector and formal private sector) has failed in generating enough jobs to absorb the graduates of local universities
179 and, therefore, it has created an excess supply of graduates. This excess supply of graduates will not have the
180 proper job opportunities and therefore, have to take up jobs which require a low level of education and of skills
181 and competencies than they have acquired.

182 However, the most significant finding was that 16 percent of the graduates in the sample were horizontally
183 mismatched (Senarath and Patabendige; 2012). Additionally, there was a positive correlation between horizontal
184 mismatch and skill underutilization. This implies that horizontal mismatch is the more significant mismatch
185 among graduates. This further implies that, the higher education system in Sri Lanka does not suit the job
186 market. It results in low employability in the graduate labour market due to information asymmetry and lack of
187 experience. Especially with regard to graduates in the management field, it can be seen that job opportunities
188 which are most relevant to their field of study are scarce. Because of this mismatch they are unable to utilize
189 their expertise and skills that they have acquired from the learning requirements ??Senarath and Patabendige,
190 2012).

191 An article by Coulon (2002) noted the drastic increase in participation in education in recent decades across
192 industrial nations, and argued that it had resulted in a population of over-educated graduates who were unable to
193 secure employment at their expected credential level, hence creating a perception of graduate underemployment,
194 where graduates identified gaps between their qualifications and the work they performed (Coulon, 2002).

195 Universities are now seriously engaging in changing their teaching-learning package to be consistent with the
196 current requirements of a challenging business environment. Accordingly, student centered teaching methods
197 are being practiced, instead of teacher centered teaching methods. This permits students to develop greater
198 initiatives for self-learning through investigation and analysis, project work of different sorts, which involves not
199 only individual work, but also team or group work.

200 Authorities have taken steps to reduce the supply area skill mismatch issues during the past decade in Sri
201 Lanka. However, even after these actions have been implemented, the issue of skill mismatch still exists. By
202 reviewing the literature of other countries, it has been identified that skill mismatch is not always a problem due
203 to inefficiency in the supply side. The literature clearly argues that skill mismatch can take place due to demand
204 area issues as well. For instance, if the number of graduates in the job market exceeds the demand, the reverse
205 scenario will occur. If the economy is unable to produce enough job opportunities to absorb the excess supply
206 of graduates, it may be difficult to find suitable jobs for graduates. Due to this disparity, the educated youth
207 have to either wait until they can find a suitable job to match their qualifications or accept any job without
208 considering their qualifications or field of study (Cedefop, 2010). As described by Cedefop (2010), when a person
209 engages in a job that doesn't tally with the level or field of study it is called Job Educational Mismatch.

210 According to the preceding literature, it can be concluded that education mismatch is a common phenomenon
211 in many countries. Moreover, it is important to review prior arguments and findings relating to the nature of the
212 education mismatch. ??arcia-Espejo & Ibanez (2006) have found that lower level returns to education may also
213 incur some non-transitory costs i.e. lower level of job satisfaction, frustration and higher turnover rate.

214 Allen and Weert (2007) have also done a cross country analysis regarding educational mismatch and identified
215 great differences between the types of educational mismatches across the countries. They revealed that over-
216 education is most common in Japan and under-education is the biggest problem in the UK. Spain experienced
217 both the problem of over-education as well as that of under-education. Japanese and British graduates were
218 more likely to work in a different field, whereas German and Dutch graduates are mostly likely to select work
219 with a perfect match in terms of the level and field of education ??Allen & Weert, 2007).

220 Many countries in the world, irrespective of their economic and political strengths, have been analysing the
221 problem of the competency gap between expected industrial needs and the skills of graduates. Right from the
222 USA to India, many countries have been generating research reports periodically on this concept. For example,
223 Shujaat et al. (??009) agreed that most university graduates were less knowledgeable, less skilled and were not
224 in accordance with the needs of the industry. Employers and industrialists also mentioned that the curriculum at
225 higher educational institutions needed to be revamped as many of the graduates produced by the institutions did

226 not meet a satisfactory level of job competency. Similarly, Mursidi and Sundiman, (2014) stated that mismatch, 227 which has occurred in education and skills, represents the gap that occurs between the criteria and requirements 228 needed by industry, which are not fulfilled with the educational levels and skills of graduates. This mismatch 229 affects the educational investment, job satisfaction, wages and job mobility ??Shujaat et al. 2009).

230 Therefore, the above discussion clearly shows that graduates are expected to act as acceptable graduates by 231 the employers, but the present attributes of the graduates do not meet that expectation. Previous researchers 232 who studied graduate unemployment in Sri Lanka and other parts of the world, clearly showed that the key 233 reasons for this phenomenon are skills mismatch and education mismatch. All the stakeholders know about this 234 including employers and academics, but the problem still remains. The existing gap between the skills required 235 by employers and the profile of the graduates has been reported as a reason for unemployment in Sri Lanka as 236 well. ??Weligamage & Siengthai, 2003). Then the question arises as to "why the problem is unsolved?" This 237 problem was further investigated and the reason was found to be one which is rooted in the lack of coordination 238 and cooperation between the main stakeholders.

239 **9 VII.**

240 **10 Lack of Coordination and Cooperation; Moving Deeper into 241 the Issue**

242 Coordination is the act of organizing different people or things to work together for a goal or to effect, or 243 fulfill desired goals in an organization. Coordination terms and models have been developed in different fields 244 to coordinate the interaction among components and objects, and are nowadays used to model and analyze 245 organizations, as well. Moreover, organizational concepts are used to enrich the existing coordination languages 246 and models (Boella& van der Torre, 2006). Most modern day organizations are characterised by complexities 247 where organizational performance is very important (Gilliland, Steiner, & Skarlicki, 2005). Cooperation is defined 248 as a common effort and an association for the purpose of common benefit and for helping one another in specific 249 ways (Forest, 2003). Therefore, coordination and cooperation are key activities in the organizational lifecycle, 250 and these two terms are used interchangeably.

251 Coordination is a formal process, because it is scientific; coordination is an informal process, because it is human 252 relations oriented; and coordination is a systemic process, because it is arriving at the most appropriate decisions 253 that can have good internal and external effects. Fayol, Gullick, and Urwick are some notable administrative 254 scholars who have dealt with coordination as a principle of organization. But little has been done to explicate the 255 centrality of coordination to other principles of administration. Accordingly, POSCORB; an acronym that stands 256 for planning, organizing, staffing, directing, coordinating, reporting, and budgeting. In brief, coordination is a 257 part of planning, because it tells what to include in a good plan and how to execute it. Coordination is part of 258 organizing, because it takes the first lead (Gulick & Urwirck, 1957). The pioneer authors in management, Taylor 259 (1993) and Clark (1996) emphasized the need of coordination in their research findings. Coordination among the 260 stakeholders is important to any organization in order to achieve its goals. Coordination is a central concept in 261 organization theory. Mintzberg (1979) has developed a typology of organizational configurations that is based 262 on a particular view of coordination mechanisms. Coordination means the sharing of information, resources and 263 responsibilities to achieve particular outcomes.

264 The components of coordination are goals, activities, actors and interdependencies. When these are not 265 manipulated properly, especially the actors, the purpose of coordination cannot be achieved. In the context of 266 the present study, it can be stated that the pursuit of academy -industry relations is absolutely necessary.

267 Internally, coordination means setting rules and standards based on cooperation; externally, coordination 268 means fostering relationships and interest aggregation. Due to the nature of internal and external complexities 269 that go with organization, coordination becomes a relevant element. Internally, organization comprises 270 management, employees, tools, structures etc. Externally, an organization comprises the environment, culture, 271 competitors etc. Coordination is part of network analysis, because of its emphasis on interdependence, 272 cooperation, trust and performance. Chester Barnard argues that an organization comes into being when certain 273 conditions are met: (a) when people are able and willing to communicate with one another (b) when the same 274 people are also willing to do something to contribute action, as he puts it, in order (c) to accomplish a common 275 purpose. The two important things here are that when individuals are able to cooperate and derive satisfactions in 276 the process of cooperation, organizations become efficient and effective, because performance is gladly. However, 277 in order to make the concept of coordination more tangible, it is relevant to investigate the design of actual 278 coordination instruments and their underlying mechanisms.

279 Numerous studies have shown that coordination and cooperation lead to improved interpersonal and inter- 280 group relations. This is because they create advanced approaches in dealing with problems that emanate 281 from intra-link and cross cultural contexts in relation to an organization (Kramer, 2010). A special focus on 282 coordination gives a good answer to the question of performance. The more efficient coordination is at all 283 levels of administration, the common outcome, cohesion, will be reached in a more efficient manner, because 284 coordination is a tool of cohesion . Every activity in an organization requires coordination of a variety of 285 functions within and between firms in order to avoid the complexities and unintended losses. Studies have shown

10 LACK OF COORDINATION AND COOPERATION; MOVING DEEPER INTO THE ISSUE

286 that top placement in an organization has a better tendency of affecting coordination, because there are top
287 management responsibilities engrossed. Top management employees in an organization assign responsibilities
288 or delegate authority to lower level employees in order to accomplish collective or stated organizational goals.
289 Lower level employees are also relevant to the coordination scheme, because without them the network is not be
290 complete (Hossain & Wu, 2009). Both the higher and lower level employees are relevant in their own relative
291 ways to the goals of an organization.

292 Furthermore, previous researchers (Denti, Omicini and Ricci, 2002) have advanced two observations about
293 coordination: (a) the rationale behind coordination is the existence of dependencies between activities or entities,
294 and (b) the goal of coordination is to manage these dependencies in such a way that the activities become part
295 of a purposeful whole (Holt, 1988). Both points deserve more attention in this study. The need for coordination
296 arises from the existence of dependencies. If there is no interdependence, then there is nothing to coordinate
297 (Malone and Crowston, 1990). As Galbraith (1995) noted, one can reduce the need for coordination by reducing
298 the interdependence. However, this can be done only to some extent.

299 Interdependencies are a fact of human life, although it is not so obvious where they come from. Economists
300 typically refer to the need for a division of labour (Douma and Schreuder, 2002). The existence of interdependence
301 between humans can also be explained by their social orientation. Taking part in collaborative practices
302 contributes to the meaningfulness of life. Yet another reason for the existence of dependencies can be drawn
303 from Simon's theory of bounded rationality (Simon, 1976). Complex organizations simply cannot be handled
304 by a single man's perspective and therefore a completely centralized control is simply infeasible. From this, it
305 follows that organizations have multiple loci of control and multiple stakeholders, who are relatively autonomous
306 in the goals they pursue, but are still interdependent ??Weigand, et al., 2003).

307 According to previous researchers, unemployment among the graduates is specifically illustrated. For example,
308 Katooli and Rahmani (2005) have undertaken to highlight the challenges facing the employment of university
309 graduates in Iran. The researchers argue that a lack of coordination between universities and government has
310 resulted in unemployed graduates. Similarly, other research findings also revealed that the lack of coordination
311 between two different stakeholders -university and government (Marzban et al., 2014), university and employers
312 (Daniel Schiller and Ingo Liefner, 2007), students and employers and the university and others ??Chak Sopheap,
313 2012), is the cause of graduate unemployment. Similarly, poor coordination and collaboration among university,
314 government and industry leads to graduate unemployment issues (Chantres, 2010 and Etzkowitz and Leydesdorff,
315 2000) An additional study conducted by Mc Goldrick, .al (2013) indicated the coordination and cooperation
316 maintained among students and postgraduate students and between students and alumni. For example the
317 students appreciated the meetings with their mentors and postgraduate coordinators (Mc Goldrick et al., 2013).
318 Similarly, other studies revealed that there exists collaboration between undergraduates and postgraduate bodies,
319 not only within the same university, but also within a whole student union (for example, the students' union of
320 the Management faculties in the country). Megehee, Hyslop and Rosso (2005) explain how chemistry students
321 collaborated with each other by using one another's compounds in different chemical studies. Accordingly, this
322 allowed the students to work not only with others in their branch of chemistry, but also with other students from
323 other branches of chemistry, namely, organic, physical, and inorganic chemistry.

324 According to another the study, the idea behind this approach was "to mimic what is found in an industrial
325 or research setting" (Megehee et al., 2005. For example, researchers working for the same organisation may be
326 working on compounds that are structurally similar; and hence, may have common shared knowledge of each
327 other's field of work. By simulating this form of work amongst the chemistry students, the results and compounds
328 were shared in class and with students in other courses for further study and experimentation. Overall, students
329 and staff found this experience to be positive, confirming that this model of interdisciplinary work promotes
330 communication skills, teamwork and understanding, and appreciation of other people's work -the skills which
331 happen to be the ones that employers seek in today's graduates (Megehee et al., 2005).

332 According to the another study conducted by Hans Weigand and de Moor (2013), the success of innovation
333 projects is critically dependent on trust between the participants and the quality of the communication, which
334 includes inside groups and between groups. Furthermore, any initiative that spans the organisation is bound to
335 require significant amounts of energy for coordination: identifying the key stakeholders, gaining their support,
336 harnessing participant collaboration, gathering requirements and establishing the roles and responsibilities of the
337 right set of people to make the goals of organisations successful.

338 The issues surrounding graduate employment are multi-sectorial and involve many stakeholders: governments,
339 educational and training institutions, employers and industries, employees, parents and families, communities, and
340 of course, the youth themselves. It is clear that the three Cscommunication, collaboration and coordinationamong
341 the various sectors and stakeholders are extremely important to ensure the positive outcomes of any strategy or
342 approach developed and implemented in the organisation. Further, Hodges and Burchell (2003) recommended
343 that cooperative education programs can help students understand that the workplace is a place where they
344 must take responsibility for identifying their own learning needs and then do something about it. Khare
345 (2014) highlighted that universities are having less and less connectivity with other stakeholders. He has
346 suggested the development of networking and connectivity in order to improve the employability among graduates.
347 A four-point networking may be intensified both at the university and the institutional levels. Industry
348 networking: develop academic networking with global and national academia and industries, Alumni networking:

349 stronger and proactive alumni to provide financial support to bright and needy students, placement guidance,
350 personality grooming, and industry exposure. Alumni-student interaction has two way benefits -students gain by
351 developing contacts, pride and perspective while alumni are able to find future employees. Global networking:
352 global experience of different countries and cultures where group internship through institutional collaborative
353 arrangements, transfer and mutual recognition with foreign universities are required, and social networking:
354 generating awareness regarding the local and global issues related to social, environmental, religious and political
355 spheres but also give a real life experience to graduates in improving the world around them. Further, government
356 networking is also important to obtain benefits from the government and provide advisory services to the
357 government related to socio-economic, political and technological development of the region or nation. Most
358 developed countries have geared themselves to create a huge network of existing universities for the transition
359 from education to work to become easier and smoother.

360 **11 VIII.**

361 **12 Conclusion**

362 This paper is designed to explore and analyse the expected attributes of management graduates. An in depth
363 review of the literature revealed that there are divergent views about graduates' attributes among industrialists,
364 students, academics and the government. However, there remains a mismatch between the attributes of
365 graduates and those needed in the workplace. Most of the studies have consistently identified that communication,
366 interpersonal skills, ethics and teamwork are competency gaps which exist among management graduates finally
367 results in unemployment among the graduates, the main reasons for unemployment among graduates is weak
368 coordination and cooperation among stakeholders. Therefore, a lack of coordination and cooperation in the
369 university system is experienced particularly in Management Faculties, which leads to the production of graduates
370 who are continually ignored by the labour market.¹

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371 [Perera and perera ()] , E Perera , K &perera , A , N , F . 2009.

372 [Nanayakkara ()] *50 years development of Management studies in modern Sri Lanka*, G Nanayakkara . 1998.

373 [Barrie ()] *A conceptual framework for the teaching and learning of generic graduate attributes. Studies in Higher Education*, S Barrie . 2007. 32 p. .

374 [Douma and schreuder ()] *Agency theory. Economic approaches to organizations. Financial Times/Prentice Hall*, S Douma , H &schreuder . 2002. Amsterdam.

375 [Dickens and Lang ()] 'An Analysis of the Nature of Unemployment in Sri Lanka'. W T Dickens , K Lang . *Journal of Development Studies* 1996. winter. 31 (4) p. .

376 [Mintzberg ()] 'An emerging strategy of" direct'. H Mintzberg . *research. Administrative science quarterly* 1979. 24 (4) p. .

377 [Tindale et al. ()] *Are our accounting programs preparing graduates for professional accounting work?*, J Tindale , E Evans , D Cable , S Mead . 2005. Sydney. (Paper presented at the Australian Association for Research in Education)

378 [Hodges and burchell ()] 'Business Graduates competencies: Employers' views on importance and performance'. D Hodges , N &burchell . *Asia Pacific Journal of Corporative Education* 2003. p. .

379 [Watts ()] *Career development learning and employability*, A G Watts . 2006.

380 [Central Bank Annual Report, available at: www.lanka. net/central bank (2003)] *Central Bank Annual Report*, available at: www.lanka. net/central bank, 2003. January 2013. Central bank of Sri Lanka

381 [Katooli and Rahmani (2005)] *Challenges facing the employment of university graduates. Tadbir Monthly*, 153, A N Katooli , R Rahmani . 2005. April 18, 2010. (Retrieved)

382 [Green et al. ()] 'Connecting long distance: Semantic distance in analogical reasoning modulates frontopolar cortex activity'. A E Green , D J Kraemer , J A Fugelsang , J R Gray , K N Dunbar . 10.1093/cercor/bhp081. *Cerebral Cortex* 2010. 20 p. .

383 [Denti et al. (2002)] 'Coordination Tools for the Development of Agent-Based Systems'. E Denti , A Omicini , A Ricci . *Proceedings of EMCSR -16th European Meeting on Cybernetics and Systems Research*, R Trappi (ed.) (EMCSR -16th European Meeting on Cybernetics and Systems ResearchVienna, Austria) 2002. April 2002. Austrian Society of Cybernetic Studies. p. .

384 [Kelly ()] *Critique and Power: recasting the Foucault/Habermas debate*, M Kelly . 1994. Cambridge, MA: MIT Press.

385 [Kramer ()] 'Department of Census and Statistics'. M W Kramer . <http://www.Statist-ics.gov.lk/page.asp?page=Labour%20Force> *Organizational socialization: Joining and leaving organizations*, (Sri Lanka) 2010. 2013. 6.

386 [Galbraith ()] *Designing organizations: An executive briefing on strategy, structure, and process*, J R Galbraith . 1995. Jossey-Bass.

387 [Taylor (1993)] 'Discretion versus policy rules in practice'. J B Taylor . *Carnegie-Rochester conference series on public policy*, (North-Holland) 1993. December. 39 p. .

388 [Pietro and urwin ()] 'Education and skills mismatch in the Italian graduate labour market'. Di Pietro , G &urwin , P . *Applied Economics. Taylor and Francis Journals* 2006. 38 (1) p. .

389 [Garcia et al. ()] 'Education-Skill Matches and Labour Achievements among Graduates in Spain'. E Garcia , Isabel , I Marta . *European Sociological Review* 2006. 22 (2) p. .

390 [Allen and Van Der ()] 'Educational mismatches versus skills mismatches: Educational mismatches versus skills mismatches: effect on wages, job satisfaction, and on-the-job search'. J Allen , V R Van Der . *Oxford Economic Papers* 2001. 53 (3) p. .

391 [Ariyawansa ()] 'Employability of Graduates of Sri Lankan Universities'. E Ariyawansa . *Sri Lankan Journal of Human Resource Management* 2008. 2 (1) . University of Kaleniya

392 [Wickramarachchi ()] *Employability of Management graduates*, M Wickramarachchi , W . www.qaacouncil.lk 2008. Convocation Address. University of Sri Jayewardenepura, University of Sri Jayewardenepura (35th convocation of the)

393 [Weligamag and Siengthai ()] 'Employer needs and graduate skills: The gap between employers' expectations and job expectations of Sri Lankan University graduates'. S Weligamag , S Siengthai . *th International Conference on Sri Lanka Studies*, 2003. (Paper submitted)

394 [Weligamag and Siengthai ()] 'Employer needs and graduate skills: The gap between employers' expectations and job expectations of Sri Lankan University graduates'. S Weligamag , S Siengthai . *th International Conference on Sri Lanka Studies*, 2003. (Paper submitted)

395 [Davison et al. ()] 'Employer satisfaction ratings of recent business graduates'. L J Davison , J M Brown , M L Davison . *Human Resource Development Quarterly* 1993. p. .

12 CONCLUSION

427 [Athula ()] 'Employer satisfaction towards business graduates in Sri Lanka'. R Athula . *International eon Social*
428 *Science and Humanity, IPEDR* 2011. IACSIT Press. 5.

429 [Nanayakkara and Nanayakkara ()] *Employment and Unemployment in Sri Lanka: Trends, Issues and Options*,
430 A G W Nanayakkara , A G W Nanayakkara . 2004. Department of Census and Statistics

431 [Employment Status of Graduates from the University of Wayamba] *Employment Status of Graduates from the*
432 *University of Wayamba*, (Unpublished)

433 [Forest et al. ()] 'Empowerment skills for family workers: A worker handbook'. C ; B Forest , M Brimble ,
434 C Cameron . *Higher Education Research & Development* 2003. 2010. 2 (5) p. . Cornell University 24.
435 Freudenberg, (Where there is a WIL there is a way)

436 [Daud et al. ()] 'Enhancing university business curriculum using an importance-performance approach'. S Daud
437 , N Abidin , N M Sapuan , J &rajadurai . *International Journal of Educational Management* 2011. (6) p. 25.

438 [Mc Goldrick et al. ()] *Expanded Family Life Cycle, The: Pearson New International Edition: Individual, Family,*
439 *and Social Perspectives*, M Mc Goldrick , B Carter , N A G Preto . 2013. Pearson Higher Ed.

440 [Simon ()] 'From substantive to procedural rationality'. H A Simon . *25 years of economic theory*, (US) 1976.
441 Springer. p. .

442 [Silva ()] 'Going green: does it depend on education, gender or income?'. De Silva , DG , RA . *Applied Economics*
443 2014. 46 (5) p. .

444 [Wickramasinghe ()] 'Graduates, University lecturers and employers' perceptions towards employability skills'.
445 V Wickramasinghe . *Education and Training* 2010. 52 (3) p. . Emerald group publishing Limited

446 [Schiller and Liefner ()] 'Higher education funding reform and university-industry links in developing countries:
447 The case of Thailand'. D Schiller , I Liefner . *Higher Education* 2007. 54 (4) p. .

448 [Ranasinghe ()] *Human resource development in Sri Lanka: present trends and future perspectives*, S Ranasinghe
449 , W . 1992.

450 [Shujat et al. ()] 'Impact of work life balance on employee job satisfaction in private banking sector of Karachi'.
451 S Shujat , F Cheema , F Bhutto . *Journal of Management and Social Sciences* 2011. 7 (2) p. .

452 [Hans and Aldo De ()] *Improving communication for collaboration in social innovation projects -a framework for*
453 *pragmatic research*, W Hans , M Aldo De . 2013. The Netherlands.

454 [Khare ()] *Indian Medicinal Plants: An Illustrated Dictionary*, C P Khare . 2014. New York: LLC.

455 [Chanthes (2010)] 'Insights into academic understanding of the university's third role in a developing system:
456 empirical evidence from Thailand'. S Chanthes . *BOOK OF ABSTRACTS*, 2010. October. p. 54.

457 [Megehee et al. ()] 'Interlaboratory collaborations in the undergraduate setting'. E G Megehee , A Hyslop , R J
458 Rosso . *J. Chem. Educ* 2005. 82 (9) p. 1345.

459 [Rose ()] 'Internships: Tapping into China's next generation of talent'. P Rose . *Asia-Pacific Journal of*
460 *Cooperative Education* 2013. 14 (2) p. .

461 [Marzban et al. ()] 'Investigating the employment profile of graduate students of Persian and English literature'.
462 B Marzban , M Yazdfazeli , M Ghodrati . *Theory and Practice in Language Studies* 2014. 4 (9) p. 1850.

463 [Green and McIntosh ()] 'Is there a genuine under-utilization of skills amongst the overqualified?'. F Green , S
464 McIntosh . *Applied Economics* 2007. 39 (4) p. .

465 [Senarath ()] *Issue of graduate employment in Sri Lanka. A study based on the concept of education mismatch with*
466 *special reference for management graduates*, C Senarath . 2012. Colombo. University of Colombo (unpublished
467 master's thesis)

468 [Senarath ()] *Issue of graduate employment in Sri Lanka. A study based on the concept of education mismatch with*
469 *special reference for management graduates (Doctoral dissertation*, C Senarath . 2012. Colombo. University
470 of Colombo (unpublished master's thesis)

471 [Senarath and Patabendige ()] 'Job-education mismatch among the graduates: A Sri Lankan Perspective'. S A
472 C L Senarath , S S J Patabendige . *Ruhuna Journal of Management and Finance* 2014. 1 (2) p. .

473 [Herath ()] *Labour market demand for Business graduates in Sri Lanka*, H Herath , T , S . 2009. (unpublished
474 Master's Thesis)

475 [Chak ()] *New Information and Communication Technologies' Influence on Activism in Cambodia*, S Chak . 2014.
476 (Browser Download This Paper)

477 [Sugahara and Coman ()] 'Perceived importance of CPA generic skills: A Japanese study'. S Sugahara , R Coman
478 . *Asian Journal of Finance & Accounting* 2010. 2 (1) p. .

479 [Mursidi and sundiman ()] 'Phenomenon on the Level of Lecturer Education, in Quality of Education and Quality
480 of Graduates'. A Mursidi , D &sundiman . *International Proceedings of Economics Development and Research*
481 2014. 81 p. 29.

482 [Bilsland et al. ()] 'Planning the Journey to Best Practice in Developing Employability Skills: Transnational
483 University Internships in Vietnam'. C Bilsland , H Nagy , P Smith . *Asia-Pacific Journal of Cooperative
484 Education* 2014. 15 (2) p. .

485 [Nawaratne ()] 'Shifting paradigms of higher education in Sri Lanka. re-creating and repositioning of Sri Lankan
486 Universities to meet emerging opportunities and challenges in a globalized environment'. S Nawaratne , J .
487 *Workshop Proceedings*, 2012.

488 [Boella et al. ()] 'Strengthening Admissible Coalitions'. G Boella , L Sauro , T L Van Der . *Proc. 17th*, (17th)
489 2006.

490 [Rodrigo ()] *Structural Reform and Labour Market, 1977-92: Sri Lankan Case Study: Social Dimension of
491 Economic Reforms in Asia*, C Rodrigo . 1994. New Delhi.

492 [Swiatek (2000)] *Student and Employer Expectation, available at*, J Swiatek . [www.ineer.org/Events/
493 ICEE2000/proceedings/title_index.htm](http://www.ineer.org/Events/ICEE2000/proceedings/title_index.htm) 2000. January 2013.

494 [Cedefop ()] *supply and demand in Europe: medium-term forecast up to 2020*, S Cedefop . 2010. Luxembourg:
495 Publications Office of the European Union.

496 [Etkowitz and leydesdorff ()] 'The dynamics of innovation: from National Systems and "Mode 2" to a Triple
497 Helix of university-industrygovernment relations'. H Etkowitz , L &leydesdorff . *Research policy* 2000. 29 (2)
498 p. .

499 [Gunatilake ()] 'The Extent and the Nature of the Structural Mismatch in domestic Labour Market'. G
500 Gunatilake . *Employment Series Research Paper* 1989.

501 [Chandrasiri ()] 'The Labour Market Experience of University Graduates in Sri Lanka'. S Chandrasiri . *Higher
502 Education Policy* 2008. 2008. 21 p. .

503 [Pop and Barkhuizen ()] 'The relationship between skills training and retention of graduate interns in a South
504 Africa information, communication and technology company'. C Pop , N Barkhuizen . *Literacy Information
505 and Computer Education Journal* 2010. 1 (2) p. .

506 [Lee ()] 'The robustness of Okun's law: Evidence from OECD countries'. J Lee . *Journal of macroeconomics*
507 2000. 22 (2) p. .

508 [Holt ()] *The role of the user in product innovation*, K Holt . 1988. 7 p. . (Technovation)

509 [Chang et al. ()] 'Trends in unemployment rates in Korea: A search-matching model interpretation'. Y Chang ,
510 J Nam , C Rhee . *Journal of the Japanese and International Economies* 2004. 18 (2) p. .

511 [Clark and Coulon ()] 'Underemployment amongst New Zealand graduates: Reflections from the lived experience'. H H Clark , A Coulon . *New Zealand Journal of Employment Relations* 1996. 2002. Cambridge university
512 press. 27 (3) p. 283. (Using language)

513 [Pinikahana ()] *Unemployment among Graduates and the Responsibility of our Universities*, J Pinikahana . 2011.
514 Melbourne.

515 [Llen and De Weert ()] 'What do educational mismatches tell us about skill mismatches? A cross-country
516 analysis'. J Llen , E De Weert . *European Journal of Education* 2007. 42 (1) p. .

517 [Malone and Crowston ()] 'What is coordination theory and how can it help design cooperative work systems'.
518 T Malone , W Crowston , K . *Proceedings of CSCW'90 -Conference on computer-supported cooperative work*,
519 (CSCW'90 -Conference on computer-supported cooperative workLos Angeles, California, United States of
520 America) 1990. p. .

521 [Gilliland et al. (ed.) ()] *What motivates fairness in organizations*, S W Gilliland , D D Steiner , D P Skarlicki .
522 Bos, K. (ed.) 2005. (& van den. IAP)