Office of Academic Advising & Student Success

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INTRODUCTION: WHAT ARE CAREER SERVICES IN UNIVERSITIES?

Career Services Centers in universities and colleges are committed to providing a holistic experience for career preparation, which includes career exploration, helping students, alumni, graduates, faculty gain better guidance & counselling. The current career service centre model has developed through <u>4 stages</u> with the current paradigm being coined as the "Social Networking Paradigm" which involves the interaction between traditional networking opportunities and the emergence of social networking; the collaboration on global forums with advanced technological tools (Schaub 2012).

This memo conducts a review of benchmarked universities & academic literature surrounding career support services offered globally. It can be used to identify key domains for career preparation/ support and the effective mode of delivery for universities.

The following are some suggestions for how this memo can be used by university leaders to identify and take away best practices from all over the world.

- 1) Section 1 (concerning career service domains) can be used by university leaders to map out their current practices in terms of number of programs/activities and in terms of the percentage of the student-population being engaged against the various domains. This mapping can help identify: which domains are currently under-served.
- 2) <u>Section 2</u> & <u>Appendix 1</u> (concerning program options) can be used to identify specific programs that can be considered or adopted to strengthen an under-served domain.
- 3) Section 3 reflects on the organisational structure of the career services office: how universities can build their capacities, and what key performance indicators can be used to monitor and evaluate the already existing structures in CSOs.

SECTION 1: WHAT KEY DOMAINS/AREAS DO UNIVERSITIES CATER TO, FOR STUDENT'S ACADEMIC AND PROFESSIONAL SUCCESS?

Review of best practices and academic literature reveals that universities' career services cover key domains to effectively support students to be successful in their academic & professional experiences post-graduation. These 6 domains are:

- *Career Exploration* Universities act as a platform to provide services that encourage students to explore different career pathways & possibilities.
- *Curating & Cataloguing Opportunities-* Universities curate & catalogue informative resources and events to help students in their transition to career life.
- *Support towards the application process*-Universities act as a platform that provides students support through application processes while applying for jobs & graduate school.
- *Career Readiness Skills-* Universities aid students in their professional & skill development that will help them be prepared for their career life, post-graduation.
- *Catering to the needs of Distinct Populations-* Universities act as a platform for diverse subpopulations and support them in their career success.
- **Support for Faculty Careers-** Universities provide support for their faculty; encouraging and revitalising their professional lives.

<u>2.1 Options for Programs & Services in All Domains</u> gives a comprehensive overview of all the programs offered in all six domains.

1.1 CAREER EXPLORATION

- What is it? Career Exploration includes all activities that directly enhance the knowledge of self and the external environment hence fostering career development. It reinvents career centres in universities from a job placement section to a more holistic career support system (Blustein 1992; Melrose & Reid 2001; Kawasaki 2006; Cheung & Arnold 2014; Cruzvergera & Dey 2014).
- *How does it help?* Streamlined services and programs for career exploration with consistent, well researched career information can help empower students to make informed career plans, pursue a meaningful work life, successfully manage rapid changes and deal with diverse transitions in life (Graunke & Woosley 2005; Schedin, McConnell & Bullock Yowell 2014; Jiang et al 2019).
- *Targets specific regional/societal mindsets:* Career exploration also plays a major role in helping students imagine/map out a bigger picture for their careers. In Pakistan, students are more focused on jobs that produce financial lucrativeness rather than self-fulfilment. Program design should include merging and creating a career approach for students that encompasses their personal hobbies/interests/ majors with their career interests.
- *A more holistic approach*: Career exploration is more holistic and covers bigger picture activities in comparison to recruitment drives and information sessions. This domain is designed to address how students can achieve certain career goals (which are not limited to only gaining jobs) by mapping out a plan for them. In comparison, recruitment drives & information sessions target specific groups and aim to gain students employment. Furthermore vocational psychologists explore the lifelong and adaptive functions of career exploration as a process that individuals can go through at all stages of their careers (Jiang et al 2019).
- *Outcomes.* Exploring career options during university, students develop a sense of identity, purpose, positive

growth in career maturity, career certainty, career related skills and career-knowledge that directly correlates to their academic goals and career path. (Kidd & Killeen 1992; Graunke & Woosley 2005; Cheung & Arnold 2014; Ghosal, Bullock & Jones 2018).

1.2 CURATING AND CATALOGUING OPPORTUNITIES.

- What is it? Career centres act as a networking platform curating informative resources and events for students, alumni and employers that give them ready access to current job postings, potential candidates, and all relevant recruitment information (Lee & Patel 2019).
- *How does it help?* Detailed services under this domain can be beneficial during recruitment drives and job hunting season; connecting employers with potential candidates.
- *Outcomes.* It increases student engagement, while positively impacting the employability of students, alumni, (Hanover Research 2019).

1.3 SUPPORT TOWARDS APPLICATION PROCESS.

- *What is it?* Support services can be provided for job applications, preparations for the job recruitment process as well as graduation school applications. (Melrose & Reid 2001; Schaub 2012)
- *How does it help?* Creates awareness amongst students about ideal qualities for employability; helps increase their skill sets while navigating the job market and while applying for graduate school (Bates and Hayes 2017).
- Outcomes. Students who participated in practical employment-related activities or had help while applying
 for jobs have more chances of landing interviews, and eventually jobs (Crosby 2009; Taylor and Hooley
 2014).

1.4 CAREER READINESS SKILLS.

- What is it? Career Readiness Skills are transferable or employability skills that students and fresh graduates need to easily transition into a successful career life. (Shaffer & Zalewski 2011; Tran 2013).
- *How does it help?* Critical Skills that help provide students with a competitive edge during current, future careers, and navigating through the complexity of higher education systems (Lee & Lee 2017).
- *Outcomes.* Students enrolled in professional development and other career readiness skills courses are more likely to be in employment or further study four to six months after graduation (Bates et al 2019).

1.5 CATERING TO THE NEEDS OF DISTINCT SUB-POPULATIONS (Alumni/Parents/Women/First-Generation Students)

• What is it? Career Services aim to cater to distinct subpopulations to increase the access of information to certain communities. These communities can be active agents in the career development of students or underrepresented groups based on geography, demography, personal characteristics and/or social & religious beliefs. The following is a table of sub-populations that career services can cater to.

Sub population	Description
Parents/ Families	 How does it help? Family functioning has an impact on career development tasks as active involvement in planning & certainty of career choices. Outcomes. Parents play an important role in helping their children develop specific skills such as work values, decision making skills, self awareness, self confidence, personal responsibility, interpersonal relationship skills & locate appropriate work opportunities (Young & Friesen; Amundsen & Penner 1998).

	Parents' occupations reinforce values of self-direction or conformity (Wright, Roscigno & Quadlin, 2021)
Alumni	• <i>How can they help?</i> Alumni can be included in career services development on two fronts, i) as collaborators and ii) as clients OR customers.
	• As collaborators, alumni can serve as advisors, mentors and potential employers for students. They can help guide students with major, career exploration, potential career pathways depending on their interests, application support, and professional development.
	• <i>Outcomes.</i> Alumni Mentoring is useful for helping mentees in career development as it is used as a support mechanism that helps them acquire and develop the competencies they need to thrive as well as the constructive work relationships they need to build their careers.
	Career Support Services FOR Alumni can help them navigate future career pivots, re entering the job force, graduate schools etc.
Disabled communities	• <i>How can it help?</i> Disabled communities often have difficulties in accessing programs and services that are especially designed to cater to their special needs. A career services support system needs to be inclusive and ensure that there are no students slipping through the cracks.
	Outcomes. Increase engagement of disabled communities and employers, development of diverse resources that can serve future sub populations.
Minorities (Religious/ Ethnic)	 How can it help? Religious minorities in a non-secular state may face difficulties in exploring career resources and pathways dependent on their religion. Through their career support services, universities can identify and develop resources that will help in job and graduate school placements for the marginalised communities at a national & international level. Ethnic minorities may have the university qualifications but might suffer worse labour market outcomes on average (Zwysen, Longhi 2017). Culturally derived/intuitive services and support is important to ensure that these groups are not marginalised. Outcomes: Increased engagements for ethnic & religious minorities, curation of resources that serve future sub-populations.
First-In-Family College Students.	 How does it help? First in Family College Students face social and resources related inequalities in universities; which can include encountering difficulties participating in extracurricular activities, building interpersonal or soft skills and accessing appropriate career exploration resources due to lack of knowledge. First Generation Students also may face familial pressure while making major or career decisions. Outcome: Early Intervention and aid in career exploration increases chances of first generation students being placed in jobs of their choices.
Women/Gender /Sexual minorities	 How does it help? For Women and gender minorities, career success is dependent on a number of factors which includes i) flexibility ii) security iii) environment. Career Support services can play a huge role in helping this underrepresented sub-population gain access to customised resources, initiatives, career pathways, graduate school opportunities that also take into account the gender-based marginalisation they face. Can play a role in developing their career readiness/ professional development skills making it easier for them to transition into career life. Outcomes: Successful job placements which keep in mind the well-being of the individuals in relevance to their gender/sexuality.

1.6 SUPPORT FOR FACULTY AND UNIVERSITY STAFF CAREERS.

- What is it? Similar to students, faculty and university staff need different kinds of support and opportunities at different stages without which they can cycle through the university with a lack of awareness or misconceptions about the career centre. Hence, the faculty should not be engaged only as partners who provide information to students about career options but as a separate distinct constituent group who need to be constantly developing (Schlesinger, Shea, Blesso 2020).
- How does it help? Universities such as Stanford, Harvard, Cornell & UPENN have also introduced career support for mid-career faculty under the term "Faculty Vitality" (<u>Schlesinger, Shea, Blesso 2020</u>). It aims to revitalise faculty members who might be feeling an "absence of motivating professional goals" (Canale 2013).
- *Concerned departments/ Campus services;* Career Support for faculty is handled by a variety of departments which can include but is not limited to the Office of Provost, Faculty Affairs & Development and Academic Affairs (Wurb, Amundsen et al 2020).
- *Support Services provided:* Some of the career support services provided by universities include leadership development, support for women faculty, mentoring (both mentor and protégé),grants and awards, sabbaticals, fellowships or some other stipend or financial remuneration(e.g., travel), and general development opportunities (<u>Schlesinger, Shea, Blesso 2020</u>).

SECTION 2: HOW CAN UNIVERSITIES EFFECTIVELY DELIVER THE SIX DOMAINS TO THE STUDENTS?

2.1 OPTIONS FOR PROGRAMS & SERVICES IN ALL DOMAINS.

• Career services centres design programs and services which encompass all domains; and aim to help their diverse population and the various sub groups in them to enter current and future careers successfully. The following table is a comprehensive overview of program design suggestions offered all over the world by career services. These programs/services cover all the domains covered in section 1. For a more detailed guide please refer to Appendix 1.

Programs/ Service	Career Exploration	Support for application process	Curating & cataloging opportunities	Career Readiness Skills	Subpopulations	Faculty Career Support.
Career Coaches/ Advisors	×	×	×	×	×	
Parents Involved Counseling Process	×	×		×	×	
Career Exploration Programs	×	×		×	×	×
Career Resource Library	×	×	×	×	×	
Career Fairs / Employer Networking Events/ Recruitment Drives	×	×	×		×	×
Workshops/Panels	×	×	×	×	×	×
Leadership Development	×			×	×	×
Employer Diversity & Rotational Program	×	×	×	×	×	
Mentorship Programs	×	×		×	×	×
Career Treks	×			×	×	
<u>Job Shadowing</u>	×			×	×	
Career Networking Platforms	×	×	×	×	×	×
Job Posting Board/ Career Portal	×	×	×		×	
Data Driven Recruiting Tools	×	×	×		×	
Cvs, Cover Letters &	×	×		×	×	

Resumes.						
Salary & Job Offers Negotiation		×		×	×	×
Mock Interviews		×		×	×	
Decoding JDs	×	×	×	×	×	
Assessment Centers/ Pre - Employment Tests		×	×	×	×	
Skill Assessment Tools	×	×	×	×	×	
<u>Psychometric Tests</u>	×	×	×	×	×	
Internship Opportunities	×	×	×	×	×	
On Campus Job Opportunities for Students	×	×	×	×	×	
LinkedIn & Online Professional Identity Development	×	×		×	×	×
Professional Development of Soft Skills	×	×		×	×	×
MS Office Development		×		×	×	×
Graduate School Application + Personal Statements	×	×	×	×	×	
Help Students get References & Recommendations.		×			×	
Scholarship /Funding/ Research Grants Guides		×	×	×	×	×
Standardized Tests Preparation		×		×	×	
Preparation for Public/Civil Service Examinations	×	×		×	×	
Sabbatical/Fellowship/ other financial remuneration	×	×		×	×	
Capacity Building Faculty Fellowships (early, mid & senior career)				×		×

SECTION 3 : WHAT OTHER MEASURES CAN UNIVERSITIES TAKE TO STRENGTHEN THEIR CAREER SUPPORT SERVICES?

Besides developing extensive programs and services to support the success of their populations, universities also have to consider other measures to further strengthen the mode of delivery as well as the internal functioning of their departments. These measures include:

- *Structure*: Career Centers work in collaboration or divide roles with relevant stakeholders to effectively deliver the six domains.
- *Capacity Building*: Career Centers build the capacity of their staff to ensure effective delivery of the six domains.
- *Monitoring*: Career Centers employ concrete KPIs to track the success and growth of their programs/service.

3.1 STRUCTURE.

 Career centres are continuously evolving structurally to cater to the growing demands of parents, students, faculty, employers and industries. Moreover, to effectively deliver the domains they have to liaison with other campus services, departments and organisations.

3.1.1 Departmental Model: Centralised/decentralised/hybrid/outsource.

- **Development of Career Services structure**: As a department, career services has been evolving over the years, Schaub (2012) examines the structure in four stages:
- *Placement Paradigm*: the first stage is from 1940s to 1950s in which the career services connected students with potential jobs.
- *Planning Paradigm*: from 1960s to 1980s career centres focused on "teaching students job search skills and strategies which includes personality & skill assessments to help them advance their immediate and long-term career goals. The service delivery model utilised with the college GIs transformed from an "employment service" to a "counselling" model (Schaub 2012; Cruzvergara & Dey 2014).
- Networking Paradigm: In the 1990's career centres coached students to take advantage of networking opportunities. Career Staff curated career fairs, alumni receptions, and facilitated student and employer participation in these events. Programs were offered at both career centres and off-campus venues, and staff assumed an organising role to supplement their career education responsibilities.
- **Social Networking Paradigm**: The 21st century saw the advent of the current paradigm which involves the career services combining traditional and social networking strategies in a global forum with the aid of advanced technological tools to provide career support services.(Schaub 2012; Cruzvergara & Dey 2014).
- *Centralised model*: Traditionally, career services offices in universities have started investing in a centralised career services model that maximises and cuts redundancies (Cruzvergara, Dey 2014). The office acts as a central platform which connects all relevant stakeholders, creating an ecosystem beyond student–employer relationships, and enriching it with relevant technology tools (Lee & Patel 2017).
- **Decentralised model**: Universities such as Columbia and UBC have opted for having multiple career services offices that belong to different campuses/schools. Under this structure, departments can create customised programs/services that cater to their unique sub-populations (Schaub 2012).
- *Hybrid Model:* An upcoming form of career services delivery model under which universities have incorporated elements of both centralised and decentralised structures. The hybrid model may take different

forms depending on the needs of the institution. It can include academic units & departments that may provide specialised career programs/services that cater to their students (Schaub 2012).

Outsourcing: This practice was viewed in the UK, where some higher-education institutions made the argument that the knowledge, resources possessed by external agencies such as employment agencies and career consultancies exceeded that of smaller universities with limited budgets (Watts, Hughes, Haslam 2001). Universities have also started giving their students access to external online career networking and AI-based career platforms that help build/critique resumes, prepare for mock interviews, provide job/internship/research opportunities and prepare for career readiness skills.

<u>Appendix 2</u> provides a comprehensive list of external online/AI career platforms that have formed partnerships with the benchmarked universities to provide career services to students.

3.1.2 Collaborators.

• Career services offices develop collaborative relationships with internal and external stakeholders to provide career support services to their diverse populations. The following is a table of collaborators and the various domains that they can help contribute to.

Collaborators	What role can they play?	Career exploration	Support Towards Application	Curating & Cataloguing	Career Readiness Skills	Distinct Subpopulation	Faculty Career Support
Career Services Office	A platform where different stakeholders connect/netwo rk	×	×	×	×	×	×
Faculty	 Collaborate for major + career advising support for students. Provide Peer mentorship to other faculty members. 	×	×			×	×
University Departments/ Department Coordinators.	 Help design initiatives/pro grams that are major specific Can help host career fairs/worksho ps On Campus Jobs. 	×	×	×	×	×	×
Student Affairs	 Identify & design programs for underrepresen ted populations. 	×				×	

Office of Provost	Design programs for faculty career support	×	×			×	×
Alumni Relations	Identify & connect alumni with CSO	×	×	×	×	×	×
Office of Academic Affairs	 Research grants/fellows hips for Faculty Facilitate Major + Career Exploration 	×	×	×		×	×
IT Services	 Design job/career portal. Liaison with international career platforms. 	×	×	×		×	×
Human Resources	 Identify on & off campus opportunities. Identify potential agencies/organizations for outsourcing career support services 	×	×	×	×	×	×

3.2. CAPACITY-BUILDING/TRAINING.

• Career services need to build the capacity of their staff to deliver quality student support services, which would include building their knowledge of career concepts, career progression, the job market and the educational programmes available for students.

Capacity Building Program or Service	Description	Tips for implementation.
Individual Professional Development Plan for Career Services Staff.	Career services staff can map out which skills they would like to develop to help them advance their career.	 Managers can collaborate with different campus services to aid staff in developing professional skills. Plans can be kept track of to ensure that staff are progressing and adding new career goals to meet.
Training in Career Counseling.	basic training in career development OR counselling and student development theory.	 Conducted regularly by professional career OR education consultants. Hire staff who have gained or are pursuing degrees or professional counselling qualifications

Project Management	basic training for staff to initiate, develop & implement projects that support career services	 Conduct regular training workshops/panels hosted by HR professionals OR career consultants. Staff should also be trained in project scoping, costing, budget planning, and conducting research.
Leadership Development	Workshops/panels for developing leadership qualities in Career Staff so they can lead their own teams.	Conducted regularly by HR consultants for in coming staff, as well as current staff.
Budget Development	a comprehensive detailed budget highlighting expenditure.	 Basic training of staff to develop budget details (this includes for small projects as well over the departmental budget). Adequate budget allocation for constant improvement, introduction of new programs/services.
Technology Training/Development	Workshops./panels/training sessions for career centers staff to navigate and understand all the technological tools used or can be used for career support services.	 Involve staff in the curation of career services portals/ job posting boards, as it would help them understand how to work these resources. Teach staff how to collect data from these platforms for surveys/reports. Teach staff how to help students better understand and use different technological career support services.
Social Media Training & Development	Regular training sessions for career staff to curate and manage career support services for students on websites such as Facebook, Instagram & LinkedIn.	 Teach staff to manage students' responses on social media websites professionally. Curate attractive career exploration & job opportunities for all students. Teach them how to expand their career services to reach all students, which includes building a positive brand image and effective social media information dissemination.

3.3 MONITORING & IMPACT EVALUATION.

 Benchmarked career services have developed comprehensive strategic plans with specific career goals and metrics to improve their abilities to track, & monitor success across a variety of initiatives OR programs OR services.

3.31 HOW CAN UNIVERSITIES ASSESS IF THEIR CAREER SERVICES SYSTEM IS WORKING EFFECTIVELY & EFFICIENTLY?

Description: To help universities assess if career support services are being effectively provided to their populations; a series of master key performance indicators have been identified.

master key performance indicators have been identified.				
MASTER KEY PERFORMANCE INDICATORS	TOOLS TO MONITOR THE KEY PERFORMANCE INDICATORS OF THE CAREER SERVICES OFFICE			
Student Satisfaction with the opportunities & support for developing their graduate attributes & employability.	 Institutional Satisfaction surveys Feedback forms after guidance interviews (2 weeks) Follow up forms 6/12 months to check on progress, impact of the guidance interview. Feedback forms on events (to inform further practice or events) 			

Student Engagement with the career support services in the university.	 Student Attendance Statistics (advising appointments & career events) Career service website traffic
Proportion of students (undergraduate & postgraduate) in graduate level employment or further study.	 Job interviews scheduled Job placement rates % increase in employment rate of recent graduates (comparative over the years increase/decrease/stagnant). Starting salaries.
Equitable access to career support services in university.	 % of diverse sub-populations who have used career support services. % of successful job placements for diverse subpopulations after guidance from career services. Survey of career support services designed specifically to target diverse sub populations.

3.32 How can Career Services Offices assess if all of the domains in their office are working efficiently?

KEY PERFORMANCE INDICATORS

posting board OR career portal.

Number of employers accessing job posting board OR career portal.

Description: To assess if all the domains under Career Services Office are working effectively, KPIs have been identified for each domain in the following table.

What tools can the Career Services Office utilize

to track & monitor performance in this domain?

opportunities are being received.

DOMAIN: CAREER EXPLORATION

STRATEGIC GOAL OR

& employers in career

support services.

FUNCTION

FUNCTION		to track & monitor performance in this domain?
Assist students with career decision making OR Career Exploration	 Counsellor to Student ratio. Number of career advising appointments scheduled. Number of students served. Number of students who attended career exploration programs. Program satisfaction rate. Number of employers and admissions representatives that participate in developmental and/or exploration programs / with students. Number of site visits. Number of career fairs held. Number of workshops/panels held. 	 Attendance Statistics. Surveys on Students' confidence levels regarding career search preparation. Exit surveys administered to students and employers at career fairs and other events. Students First Career Choices Survey Report.
DOMAIN: CURATING & O	CATALOGUING OPPORTUNITIES	
STRATEGIC GOAL OR FUNCTION	KEY PERFORMANCE INDICATORS IN THIS DOMAIN	What tools can the Career Services Office utilize to track & monitor performance in this domain?
To curate and catalogue opportunities that effectively assist students	Number of career fairs curated by career staff.Number of students accessing job	 Annual Reviews/Reports by Career Services. Feedback Surveys from different populations about how the different curated and catalogued

DOMAIN: SUPPORT FOR APPLICATION PROCESSES				
Strategic Goal OR Function	Key Performance Indicators for this domain.	What tools can the Career Services Office utilize to track & monitor performance in this domain		
To effectively support students in their application process (for jobs & further studies)	 Number of on campus interviews. Number of mock interviews. Number of internships available. Number of practice assessments carried out. Number of psychometric tests carried out. Number of resumes/coverletters/CVs checked. Number of personal statements checked. Number of practice standardised tests carried out. Graduate school placements. Successful job placements. Successful internship opportunities, 	 Attendance Statistics. First Destination Surveys. Summer Activities Reports. 		
DOMAIN: CAREER READINESS SKILLS				
Strategic Goal OR Function	Key Performance Indicators for this domain	What tools can the Career Services Office utilize to track & monitor performance in this domain.		
Assisting students in developing career readiness skills.	 Number of professional development workshops/panels held. Number of students attended professional development activities. Number of skill assessments held. Successful job placements. Successful internship opportunities. 	 Feedback surveys from Students. Annual Career Services Review/Reports. 		
DOMAIN: CATER TO DIFFERENT SUBPOPULATIONS				
Strategic Goal or Function	Key Performance Indicators for this domain	What tools can the Career Services Office utilize to track & monitor performance in this domain.		
Develop inclusive services that cater to diverse and all subpopulations.	 Number of first generation/disabled/minorities/Al umni advised. Number of workshops/panels held for first generation/disabled/minorities/Al umni. Number of parents counselled. Number of workshops/panels held for parents. Number of successful job placements for first generation/disabled/minorities. Program satisfaction rate for students, alumni & parents. 	 First Destination Surveys. Feedback Surveys from Students, Parents & employers. Attendance Statistics. Alumni Surveys. Four Year Look Reports. 		

	 Successful graduate school placement. Successful internship opportunities. 			
DOMAIN: SUPPORT FOR FACULTY CAREERS.				
Strategic Goal or Function	Key Performance Indicators for this domain	What tools can the Career Services Office utilize to track & monitor performance in this domain.		
Support university's faculty in further progressing in their careers.	 Number of grants/ fellowships/awards each faculty member has received. Number of new research published by faculty each year. Number of mentorship programs attended by faculty members. 	 Faculty Satisfaction Surveys. Faculty Well-Being Survey. Survey of Pre-tenured Faculty. 		

APPENDIX 1: PROGRAM OPTIONS (descriptions, implementation tips, best practice models)

• The following appendix is a detailed overview of all the program options mentioned in 2.1 along with best practices examples from benchmarked universities from all over the world.

Career Coaches/ Advisors.

Description: Trained career coaching staff advise students in various career related opportunities, through one on one sessions, informal chats, and in small & big groups

Good examples: Wellesely | Princeton | Cambridge | Columbia

Implementation tips:

- CSO can liaison with faculty, alumni & industry specialists to provide career counselling to students.
- Industry Specific Advisors can be hired for seniors/graduating batches to give them a better understanding of what to expect from their potential careers.

Anything else in the literature:

• At larger institutions offering a range of academic programs, it is unreasonable to expect career counsellors at a centralised career centre to possess industry-based knowledge that will meet the needs of all students. For this reason, career centres may offer industry specialists or employment advisors to help students prepare for a job search in a specific industry. In addition to offering one-on-one career advising, industry specialists coordinate employer visits and information sessions, strive to increase a company's involvement with the career services office, explore new industry-based job posting boards and association Websites, and connect students with alumni. Industry-based employment advising can provide a critical link between career exploration and the world of work (Schaub 2012).

One on One Advising for Students.

Description: Trained career coaching staff advise all students in career exploration, applications for jobs, and career readiness skills preparations.

Good examples: Wellesely | Princeton | Cambridge | Columbia

Implementation tips:

- Counsel individual students keeping in mind their specific interests/hobbies/career pathways.
- One-on-one advisors should encourage students to create career goals that are not just based on financial lucrativeness but also on being fulfilling for themselves.
- Advisors can schedule appointments with students and parents to discuss societal & financial pressures that force students to make career decisions that stray away from their actual aspirations.

Anything interesting in the literature:

- Advisors can also play a key role in helping students select or create a major that really responds to their interests and purposes (Chickering 1994). Students find it difficult to leave the structured world of the college to an uncertain future, fresh graduates who have enjoyed positions of leadership and popularity may find it difficult to start from the bottom again. Through career counselling or Coaching, advisors can better help students understand the world outside of college or university and help them build realistic expectations that will help them better transition to the world and career life.
- Surveys & reports from academic literature highlight that in the 21st century advising consists of two components which advisors need to cover: academic & career exploration.
- In terms of who can counsel OR coach students incoming Freshmen and higher, studies highlight that academic OR Faculty advisors can play a huge role in guiding students & developing their capacity for the students preferred OR chosen career pathway. The advisor can encourage students to assess his or her personal work values that would help them better understand and guide students to make important decisions about choosing a major that would result in a successful career pathway. (Childress: NACADA 1998)

Parents Involved Counseling Process.

Description: Involve parents actively/ as observers in their child's career decision making process

Good examples: Berkeley | Yale | McGill University

Implementation tips:

- Plan focus groups with both parents and students, including interactive activities.
- Create guides for parents that help them understand how they can better direct their children towards the career they desire.

Anything else in the Literature:

• Parents play an important role in helping their children develop specific skills such as work values, decision making skills, self awareness, self confidence, personal responsibility, interpersonal relationship skills & locate appropriate work opportunities (Young & Friesen; Amundsen & Penner 1998)

Career Exploration Programs.

Description: a series of specialized career development courses/modules that help students plan their personal own career program. These programs can include toolkits that help students explore different areas of what their careers can look like or he

Good examples: Cornell | Stanford | North Carolina University. | Columbia

Implementation tips:

- Can create an online toolkit on websites such as Canvas, which can be easily accessible to students.
- Can include modules on major identification, desired career pathways, application support, career readiness skills, customized resources for subpopulations & faculty.

Anything else in the literature:

- In their review of a multidimensional survey conducted in 2009 that covers the experiences of undergraduates studying at large research, public institutions in USA Storia & Stebelton 2013 analyze studies that acknowledge the vital importance of choosing an academic major & its connection with career exploration. According to the US Department of Education 2001, "students' undergraduate major is significantly correlated with job stability & job satisfaction," and the academic major has a significant impact on career opportunities & salaries.
- Career Exploratory Programs can be beneficial for all years of college/university/higher education, but they usually begin from Freshman year to help students easily transition into college and plan their major and four years to result in a successful career pathway.
- Graunke & Woosley (2005) research shows that students are making decisions in their sophomore year which includes choosing a major and career path; decisions that impact their future success significantly.
- A fundamental building block in defining these academic goals and career paths is clarifying a sense of identity & purpose (Ghosal, Bullock & Jones 2018).
- Graunke & Woosley (2005) also emphasize the need to develop year specific career exploratory programs as their research suggests that there is a need to be cautious in applying what is known about first-year students to students who have progressed beyond the first year. The findings also suggest that institutions may want to develop sophomore specific programs. Issues faced by students in first year may not hold the importance for the students at other stages in college career.

Career Resource Library.

Description: books and resources provided by universities for students to explore different industries, aspects of professional development and careers.

Good examples: University of Toronto | Princeton | Wellesley | McGill University

Implementation tips:

- Dividing the career resource library by profession/sector can be helpful for students to explore.
- The resources can be provided by potential recruiters, alumni, and organizations, to better guide students while applying for jobs.
- Provide separate resources for sub populations such as parents, minorities, first generation/low income students.
- Design short video tutorials on various career topics which can include but are not limited to; major exploration, careers associated with all majors, how to use career-related technology (career portals, job posting boards, alumni database, AI-specific career platforms), how to build resumes/CVs and cover letters, tips on how to conduct yourself during interviews, leadership, professional development and how to main a professional identity online successfully.

Career Fairs

Description: Are valuable programs that connect students with employers (and school alumni) who provide information about job occupations, internships and industries.

Good examples: University of Toronto | Yale | NYU-Abu Dhabi | Habib University | Technische Universitat Munchen | HKU

Implementation tips:

- Career fair formats include general fairs open to companies representing all occupational fields and to students from all academic majors.
- Specialized or "niche" fairs that target particular industry groups (e.g., healthcare) or student majors (e.g., science majors).
- Employed a "speed networking" format in which a student speaks with an employer at a table for 5 to 10 minutes before moving on to a new employer at another table.
- Collaborate with alumni relations offices to find alumni volunteers from all organizations.

Workshops/ Panels.

Description: Interactive or lecture based informational sessions for different sub-populations.

Good examples: McGill University | University of Toronto | KU Leuven | ETH Zurich

Implementation tips:

+Design workshops/panels targeting first-generation students/low income/ parents/ disabled communities.

Anything Else interesting found in literature:

• A case study conducted of the Undergraduate Leadership Workshop at the National Center for Atmospheric Research suggested that the overall value of short but intense programs with opportunities for exposure to careers, professional development, mentoring, and peer-relationship building have a significant positive impact without the effort or cost of a full-fledged internship (Sloan et al 2017)

Employer Diversity & Rotational Programs.

Description: Career Services network with employers and work to cultivate programs which have diverse applicants. Students are not just hired to work in one department but get to experience different areas of expertise as they are on rotation.

Good examples: Princeton

Implementation tips:

- Curate a list of programs and employers that offer diversity programs.
- Inform students from distinct sub-populations and aid them in the application process.
- Have a diverse range of programs from structured internships to workshops and seminars intended to prepare students for internships and career options in organizations.

Mentorship Programs.

Description: Designed to facilitate different sub-populations such as students, alumni & faculty to help them make decisions regarding their career goals.

Good examples: UChicago | CALTECH | Technische Universitat Munchen | Stanford | Cornell | Harvard

Implementation tips:

- Guide and train students and faculty to be effective peer mentors.
- Research and document best practices for mentoring to further develop programs/services.
- Encourage faculty members to actively take part in mentoring programs.

Anything Else interesting found in literature:

- Mentoring can play a positive role in career development with students in higher education. A three year longitudinal study discovered that students with mentoring have "higher levels of passion, sacrifice, transcendent summons, prosocial orientation, purposefulness, identity and pervasiveness than students without a mentor" (Rosa, Vianello & Barbieri 2018)
- Through formal & informal mentorship in universities mentors provide young adults with career enhancing functions such as sponsorship, coaching, facilitating exposure & visibility & offering them challenging work or protections (Kram et al 1985).
- The Mentoring Conference 2008 brings together faculty, researchers, and professionals in higher education to share

Career Treks.

Description:

They are short-term opportunities to gain valuable workplace experience, receive mentorship and learn about a local industry. **Good examples:** McMaster University | UChicago

Implementation tips:

- Provide career treks from different diverse industries in diverse categories.
- Can be scheduled for students, faculty, parents, women-specific.
- Get feedback from attendees to get a better understanding of how the program has been able to help.

Job Shadowing.

Description: Can explore different careers by shadowing industry experts for a day or more.

Good examples: University of Toronto | KU Leuven | LSE | UChicago

Implementation tips:

- Identify potential mentors/experts willing to impart their expertise onto fresh students.
- Job Shadowing can also be provided for staff who want to explore other career options.
- An option for Parents to help them better understand the career their child wants to pursue.

Recruitment Drives.

Description: Where employers come with the specific aim of looking for fresh graduates/employees for their organizations **Good examples:** Habib University

Implementation Tips:

• Diversify the portfolio of organizations that come for recruitment drives. Currently recruitment drives are heavily concentrating on bigger/corporate/ multinational companies, career services offices should also reach out to smaller organizations belonging to different sectors to cater to more of the population.

Career Networking Platforms.

Description: For networking and learning more about different career pathways students are given access to a variety of career networking platforms on which they can connect with alumni, employers and organizations. These networking platforms are an online form of career services, catering to all domains.

Good examples: Yale | Princeton | UChicago | Berkeley

Implementation tips:

- Make the online recruiting/networking platform faster, more user friendly, scalable, mobile-friendly, and open to future integration with other platforms.
- Ensure that the platform is designed for mobile use; universities have started making their networking platforms into mobile based applications available for Androids or Apple. It makes it easier for students to network and stay updated all the time.
- Form partnerships/collaborate with external career networking platforms to give students a wider platform for job opportunities, connecting students with employers.
- Some examples of career recruiting/networking platforms are: <u>JobTeaser | 12Twenty | Symplicity CSM | Firsthand.co | GoinGlobal</u>

Anything else Interesting in the Literature:

• Handshake, a career and recruitment management platform is now used by over 500 universities. Compared to previous college career networks, this new platform provided additional tools (e.g. for maintaining a career journal, for integrating with social media). Most importantly, it allowed all stakeholders to connect in one place online (Lee & Patel 2019). Some examples of universities using Handshake as a primary or secondary career platform are: Uchicago, Wellesley, Berkeley, and Stanford.

Job Posting Board/Career Portal.

Description: A job posting board or a career portal is where the career services posts all relevant information about current vacancies, internship openings for students to view and then apply to.

Implementation tips:

- Make the job posting board/career portal accessible on phone/off campus for students, alumni.
- Curate customized resources/vacancies that list distinct subpopulations such as first generation/low-income students, disabled communities, women,gender minorities as first preferences.
- Ensure there is diversity in the opportunities available, that cater to all students and not just specific departments/ schools.

Student Profiling Databases.

Description: an online tool that helps employers identify graduates for positions keeping in consideration their industry. **Good examples:** <u>UPENN- Candidate Match</u>

Implementation Tips:

 Regularly update the database so that employers have the latest information on university graduates and potential employees.

Anything else Interesting in the Literature:

- Career Centers have started online versions of career support services, which includes developing technological services that cater to students and employers.
- Employers have started using websites, databases, and instant messaging to recruit, track, and communicate with college students. Online assessments are also popular with employers, as are, increasingly, the review of social networking websites to evaluate student applicants (Giordani, 2006).
- Giordani (2006) reported that one in 10 employers use social networking websites as part of the hiring process.

Decoding JDs.

Description: Helping students develop their skills to read and decode job descriptions provided by employers & organizations **Good examples:** University of Ashoka Dhaka

Implementation Tips:

- Provide guidelines for students to understand the job descriptions and whether they are fully qualified for it.
- Provide access to online tools to help decode or analyze biases inside a job description. This practice may be particularly
 useful for sub populations such as minorities/first generation students/women as it would help them avoid or negotiate
 job spaces that may be discriminatory

CVs, Resumes & Cover Letters Preparation.

Description: A part of the initial application process which aims to broadcast a student's abilities to potential employers. **Good examples:** HKU | Cambridge | Stanford | UCLA | Cornell | Politecnico di Milano

Implementation Tips:

- Develop AI/ technological tools that students can access online to check their CVs/Resumes/Cover Letters. For this purpose career services can also provide students with access to external websites.
- An example of an external AI career service is <u>Vmock</u>, which helps students create resumes and CVs.
- Online tools will be faster; reducing the burden on staff.
- Also provide a guide for students to write/customize good resumes, and cover letters.
- Develop workshops/ interactive sessions for distinct populations such as first generation/low-income /disabled students.

Mock Interviews.

Description: Conducted by career services staff to help students understand what is expected of them by the employers during interviews.

Good examples: HKU | Habib University | Oxford | Trinity College Dublin | ETH Zurich

Implementation Tips:

- Train students how to present themselves in online/telephone interviews.
- Give students access to online interviewing training tools such as InterviewFocus.
- As many interviews take place in stages, the mock assessments might also include variations such as technical/case/ panels/behavioral interviews.
- The aim is to develop students' skills to attend these interviews and showcase their strengths/abilities.

Assessment Centers/ Pre-Employment Tests.

Description: Career Services Staff curate/ replicate pre-employment tests/assessments for students to give them a better understanding of what to expect from actual assessments conducted by organizations.

Good Examples: Habib University | Trinity College Dublin | Princeton | ETH Zurich

Implementation Tips:

- Develop a diverse set of pre-employment tests which can include but is not limited to individual/group/online.
- Provide feedback for students on how to develop their assessment taking abilities, evaluate the components in which students are lacking and offer workshops/tutorials to improve the situation.

Preparation for Public/Civil Service Examination.

Description: prepares students for public & civil service examinations.

Implementation tips:

- Provide students with classes that help guide them how to attempt to learn all the course material for these examinations.
- Assessment centers where they can take practice exams.
- Scoring and feedback about how to improve their scores.
- Target distinct sub-populations to increase their attendance in these exams.

Evaluating Job Offers & Salary Negotiations.

Description:

- Career Services also provide guidelines for different sub-populations when they are evaluating job offers & salaries.
- Some of these guidelines include how to consider the entire compensation package, and things to ask for when receiving an offer.

Good examples: Yale | Harvard | Cornell |

Implementation Tips:

- Target graduating sub-populations as they may be one of the groups that struggle while negotiating salaries/evaluating job offers.
- Develop or give access to online salary trackers that students or alumni can use at their own experience to evaluate job offers.

Anything else in Literature:

- Negotiation is a critical element in finalizing job offers and accepting promotions and thus in determining pay. But
 negotiation does not occur in a vacuum; negotiation takes place in a complex environment constrained by many social
 psychological variables.
- <u>Wade (2001)</u> argues that roles for minorities such as women are pre-determined by external social forces; and materialize in the form of barriers to salary negotiation.
- Some of these barriers include; career orientation, traditionalism in career choices and family or social roles. All of these variables constrain marginalized communities to advocate for themselves freely in terms of salaries.

Skill Assessment Tools.

Description: Allow students to self assess what their strengths and weaknesses are, and what skills do they need to develop. **Good Examples:** Amherst College | Cambridge | UPENN

Implementation Tips:

- Create/Customize an online tool such as a Skill Tracker, which identifies the type of skills students need dependent on their majors, career interests, & job requirements.
- Keep updating students on changing requirements of the job markets regarding skill sets

Psychometric Tests.

Description: A series of tests through which counselors/employers can assess a students personality type and recommend/give jobs accordingly. Assessment tools such as psychometric tests are used to objectively measure the students personality traits, aptitude, intelligence, abilities and behavioral style.

Good Examples: <u>UPENN</u> | <u>Cambridge</u> | <u>Oxford</u>

Implementation Tips:

- Research on the diverse number of tests given by employers, and curate/customize tests accordingly for students, so they can have a better understanding of psychometric tests and how to attempt them.
- Have online psychometric tests that can be easily accessible by students.

Anything else in the literature:

- The Myers-Briggs Type Indicator (MBTI) is widely used by career counselors to assess personality preferences for important career-related variables such as career fields, work environments, and job search strategies (Schaub 2012.
- The Self-Directed Search and the Strong Interest Inventory, both rooted in Holland's (1997) theory of personality and interests, are well established and frequently used by career counselors. It evaluates the client's interests for 30 broad occupational/work task categories, occupational scales that compare the client's interests to people working in 122 occupations, and personal style scales that describe the client's preferences for different work and educational environments (Schaub 2012)

Internship Opportunities.

Description: These are unpaid/paid opportunities that can help students better explore their career pathways while also acquiring academic and career experience during their time in university.

Good Examples: Yale | Imperial College London | MIT

Implementation Tips:

- Give students access to external internship listing boards such as Intern from Home, BenchSpace.
- Target distinct subpopulations and help them gain valuable/learned work experience that may help them achieve/explore their career goals.

Anything else in the literature:

- NACE 2011 stated that 69% of students were placed in an internship while in college, usually with the assistance of career centers. Career center staff work diligently to develop relationships with employers to ensure that internship and job posting sites feature opportunities that span a range of industries and locations.
- Career Centers may also offer students internships to complete their academic credit; of schools that offer credit for internships, 76% included their career services office in creating and helping students locate the academic internship (NACE, 2011, January).

On Campus Job Opportunities.

Description: Jobs that are available for students inside the university, these can range from teaching & research assistants and administrative internships.

Good Examples: <u>University of Toronto | University of British Columbia | Berkeley | ETH Zurich |</u>

Implementation Tips:

- Develop a diverse set of pre-employment tests which can include but is not limited to individual/group/online.
- Provide feedback for students on how to develop their assessment taking abilities, evaluate the components in which students are lacking and offer workshops/tutorials to improve the situation.

Leadership Development.

Description: Interactive or lecture based informational sessions based on leadership for different sub-populations.

Good examples: <u>Harvard | Princeton | UPENN</u>

Implementation tips:

- Design workshops/panels/courses/toolkits targeting first-generation students/low income/ parents/ disabled communities.
- Design workshops/courses/ toolkits targeting women faculty and universities' staff.
- Content of the workshops can include discussing what informal leadership looks like, and learn to lead using values to guide their choices and actions.

• Guide them to practice listening, respecting diverse opinions, and encouraging their team members to lead in individual areas of strength.

Anything Else interesting found in literature:

• The ULW has developed a leadership model based on service to society and inclusion. First, students meet with the organization's leadership to hear about the leaders' roles and experiences. In a series of seminars, students then work to identify characteristics of good leaders, discuss what informal leadership looks like, and learn to lead using values to guide their choices and actions. They practice listening, respecting diverse opinions, and encouraging their team members to lead in individual areas of strength. (Sloan et al 2017).

LinkedIn & Online Professional Identity Development.

Description: Universities have now started helping students build their online portfolio on websites such as Linkedin & Facebook & Instagram. As more employers also tend to reach out through social media websites it's become important that students cultivate the right identity online.

Good examples: Yale | Princeton | LSE

Implementation tips:

- Design guides/workshops that can help students better create their professional identity online.
- Provide memberships through university's career services to access the various resources provided by LinkedIn/other professional networking websites, so students can better build their profiles.
- Review and provide feedback to students about their online professional profiles.

Anything else in the literature:

- Social media can be a powerful tool for increasing brand recognition and delivering key messages, especially among younger people. Thus embracing social media can help organizations to compete for students' attention and time more effectively.
- A research study conducted on a social media campaign evaluated that social media not only improved the loyalty of students already utilizing career services but also led to a higher conversion rate among those who had never interacted with career services. (Lee & Patel 2019)

Professional Development of Soft Skills.

Description: Helping students gain experience in working in teams, managing a project, meeting deadlines, and presenting their materials and other career readiness skills with guidance from staff throughout the process.

Good examples: LSE | Williams College | Princeton

Implementation tips:

• Have regular workshops/panels that help students develop their career readiness skills.

Anything else in the literature:

- One of the reasons why recent graduates have issues in finding new jobs is because they lack soft skills. Recruiters complain that mostly graduates have all the technical skills needed but their soft skills (oral communication, team work etc) are often weak or missing altogether (Tran, 2013).
- In their review of a human capital approach to Career advising, Shaffer & Zalewski (2011) have reviewed the maintenance of one's employability. According to the review, an employee's portfolio is usually characterized as a set of portable or transferable skills. These skills are not specific but tend to be general and include the following:
 - 1) Interpersonal skills
 - 2) Communication
 - 3) Teamwork
 - 4) Negotiation
 - 5) Conflict resolution
 - 6) Leadership.

MS Office Development.

Description: Career Services helps develop students', faculty's, staff and alumni skills in Microsoft office, which includes Word, Powerpoint & Excel.

Good examples: University of Ashoka (Dhaka) | Swarthmore College

Implementation tips:

• Design guides/workshops that can help students better understand MS Office.

Graduate School Application + Personal Statements.

Description: Provides application support services for students applying for graduate school (MSC/PHD/Fellowships). These services can include helping students explore different options for graduate schools, providing resources/information about the application process/critiquing personal statements and project proposals.

Good examples: Cambridge | Oxford | University College London | McMaster University

Implementation tips:

- Provide students with resources that help them explore the potential graduate school options and how they connect with their career pathways.
- Conduct research on admissions committees of universities and help students curate applications accordingly.
- Help students reach out to faculty members from universities/departments.

Help Students get References & Recommendations.

Description: For internships, jobs & graduate school, students & alumni often need to reach out to professors for references & recommendations. In some universities, career services are the communication channel through which necessary documents are acquired.

Good examples: Pomona College | Imperial College London

Implementation tips:

- An online portal that can allow students to fill in requests for recommendations & references from professors.
- For Alumni, career services can play a very central role in being a line of communication, keeping alumni updated about professors' information. Information can include updated contact details like emails, phone numbers etc.

Scholarship/Funding/Research Grant Guides

Description: provide scholarship/funding options/research grants for students applying for graduate/postgraduate school. Career services also provide funding options for students who are planning on applying for volunteer work/unpaid career pathways.

Good examples: Oxford | Princeton | Williams College

Implementation tips:

- Provide funding for students who are pursuing unpaid opportunities with non-profit organizations. A stipend for living expenses/transport.
- Raise awareness of external funds and private organizations that also provide scholarships to students for graduate studies.
- Target distinct populations such as minorities/faculties and connect them to relevant organizations/scholarships/grants.

Standardized Test Preparations.

Description: prepares students for standardized testing such as GRE, GMAT and other required tests to apply for graduate school.

Good examples: Berkelev | Cornell

Implementation tips:

- Provide preparation classes for tests such as GRE, GMAT, LSAT, MAT, MCAT.
- Cater to sub populations such as disabled communities, to ensure that they are given an equal chance to attempt tests and enter graduate school.
- Provide online resources for all standardized testing procedures.

Sabbatical/Fellowships/ other financial remuneration for Faculty & Career Staff.

Description: To develop/vitalize the professional careers of faculties & career staff in universities, career services may support these groups in finding/allocating sabbaticals, fellowships, other financial remunerations that would help them seek other professional interests while also keeping their jobs.

Good examples: Cornell | Harvard | Stanford

Implementation tips:

• Ensure that the financial remunerations are not only for career purposes but options are available for staff/faculty who

face financial difficulties/ belong to minorities.

• Give access to staff & faculty to external fellowships, build a separate resource library targeting these groups.

Capacity Building Faculty Fellowships (early, mid & senior career).

Description: To develop/vitalize the professional careers of faculties,it can include research support, technological resources,leadership/project management skills.

Implementation tips:

 Have regular workshops that target faculties, the subject of these workshops/panels can range from updates on recent research techniques, new technological advances/how to use advanced technology for research collection or data interpretation, development of interpersonal skills, leadership, mentoring of women faculty members and project management.

APPENDIX 2: CAREER PLATFORM OPTIONS (key features & limitations)

- The following is the list of external career platforms that career services offices all over the world have formed partnerships with to give their students a more holistic career experience. Some of the overall limitations of all these platforms include:
- May not provide the same customized support as students might receive from their own university.
- It requires students to have some knowledge of their career goals/aspirations, and might be difficult for undecided students to connect efficiently with employers.
- For smaller companies the cost of job posting, running analytics & application tracking might accumulate without any significant results.
- It might lead to unique students getting lost in a sea of applications.

HANDSHAKE

Description: Is a career networking platform that connects students, alumni and employers with each other. **Key Features:**

- Provides career tips for pursuing specific jobs (remote or otherwise),
- Resources for boot camps/summer schools for professional development.
- Directly get in touch with employers.

GOINGLOBAL

Description: A career networking platform that provides career and employment resources for over 120 worldwide locations. **Key Features**:

- Provides a list of US employers who are looking for international candidates and willing to provide the H1B visa
- Gives students access to thousands of internship opportunities, both at home and abroad.
- Listings of professional associations, social and volunteer organizations for business and social networking opportunities.

Limitations

• Similar to Handshake, it may prove difficult to navigate

Symplicity

Description: Provides students with the tools and connections they need to enhance their employability while preparing to succeed in today's job market.

Key Features:

- Provides inclusive resources for diverse sub-populations such as the disabled communities.
- Identifies trends for growing support requests & arrange more resources for student satisfaction.
- Enterprise case management solutions that assist students in issues ranging from social adjustment, academic concerns to financial hardship.

FirstHand.Co

Description: Provides first-hand insight and unique resources for students, job-seekers & professionals to find career paths. **Key Features**:

- Mentors who provide resume critiques, mock interviews, firsthand knowledge of roles and industries
- Access to jobs & internships from a diverse range of employers.
- Access to private events and have one-on-one interactions with recruiters and employees from top-ranked companies.

Job Teaser

Description: A posting board with over 10,000 job & internship listings.

Key Features:

- Offer physical & virtual events for career readiness/ job preparation skills.
- Diverse range of companies in different sectors which include; banking, food & retail, education management, cosmetics. The company's range from being multinational to smaller companies with only 92 employees.

12Twenty

Description: A data driven career services platform which helps universities career services office manage and curate program services that cover all domains.

Key Features:

- Virtual appointments with career counsellors.
- Offer virtual career fairs & events.
- Customizable experiential learning tool (internship/externship/pro-bono tracking).
- Posting boards for job & internships listings.

Interview Focus

Description: Training for soft skills needed during job interviews.

Key Features:

- Mock Interviews: offer eye & head tracking software that scores performances according to pre-identified 7 key factors.
- Advice about job interviews from a certified career coach.

Costs:

• Offers a diverse range of packages which range from \$49 to \$175

VMock

Description: a career acceleration platform powered by artificial intelligence; engages with students & alumni to provide career services.

Key Features:

- Real time tracking of students performance and offers virtual coaching accordingly.
- Job sources curated from students' preferences from a variety of sources

APPENDIX 3: SOURCES.

- For the purpose of Research for this best practices memo, the following resources have been consulted
 - o Benchmarked Universities: University pages and Office of Career Services websites.
 - Case studies, literature reviews, industry reports, meta analyses and university-based research reports have also been consulted to understand, and identify the various ways universities provide career support services to students.

Benchmarked Universities.

- Research identified the top 45 universities from all around the world based on their global ranking.
- For each university the following pages have been reviewed and relevant information has been extracted.
 - *Overview Pages* which are given on the homepage of the undergraduate program.
 - *Specific departmental and schools pages* to evaluate if they offer any career services besides the main CSO.
 - Main Career Services office pages to get an indepth look into the various programs/ activities provided by each university
 - o *Google Search of the university* to identify/find university-based reports on career services, its programs and its outcomes.
- The following is a comprehensive list of all the universities and the region that they belong to.

GLOBALLY RANKED UNIVERSITIES

- 1. MIT
- 2. Stanford
- 3. Harvard
- 4. Caltech
- 5. Oxford
- 6. ETH Zurich (Swiss Federal Technology Institute)
- 7. Cambridge
- 8. Imperial College London
- 9. University of Chicago
- 10. University College London (UCL)

TOP US UNIVERSITIES (GENERAL, COMMUNITY COLLEGES & LIBERAL ARTS COLLEGES)

USA UNIVERSITIES (GENERAL)

- 1. University of California, Berkeley (UCB)
- 2. Columbia University
- 3. University of California, Los Angeles (UCLA)
- 4. Yale University
- 5. University of Pennsylvania
- 6. Princeton University
- 7. Cornell

US Community Colleges

- 1. State Technical College of Missouri
- 2. Arkansas State University, Mountain Home
- 3. College of San Mateo
- 4. Northwest Iowa Community College
- 5. Northern Wyoming Community College District

US Liberal Arts Colleges

- 1. Williams College
- 2. Amherst College
- 3. Swarthmore College
- 4. Pomona College
- 5. Wellesley College

UK UNIVERSITIES

- 1. University of Oxford
- 2. University of Cambridge
- 3. Imperial College London
- 4. University College london
- 5. London School of Economics

CANADIAN UNIVERSITIES

- 1. University of Toronto
- 2. University of British Columbia
- 3. McGill University
- 4. McMaster University

EUROPEAN UNIVERSITIES

- 1. University of Vienna Austria
- 2. KU Leuven Belgium
- 3. Paris Sciences et Lettres Research University (PSL) Paris
- 4. Technische Universität München Germany
- 5. Trinity College Dublin Ireland
- 6. Politecnico di Milano Italy
- 7. Delft University of Technology Netherlands
- 8. University of Barcelona Spain

SOUTH ASIAN UNIVERSITIES

- 1. Habib
- 2. FCC
- 3. NYU-Abu Dhabi
- 4. Yale-NUS
- 5. University of South Asia (Dhaka)
- 6. Ashoka (India)
- 7. University of Hong Kong (HKU)

Bibliography

• Sources consulted include research papers, articles, case studies, industry reports, literature reviews and meta analysis. The following is a comprehensive list of all the sources consulted divided by categories.

1. LITERATURE REVIEW.

- Jiang, Z., Newman, A., Le, H., Presbitero, A., & Zheng, C. (2019). Career exploration: A review and future research agenda. *Journal of Vocational Behavior*, *110*, 338–356. https://doi.org/10.1016/j.jvb.2018.08.008
- Wurb, L., Amundsen, W., Ho Si, A., Boz
- M., & Makardajh, A. (2020). The Effect of Increasing Student Involvement with Career Development Services: The Integration of Faculty Members & Fostering Student/Faculty Relationships. *MacEwan University Student e Journal*.
- Gahagan, J., & Hunter, M.S. (2008). Engaging Sophomores: Attending to the Needs of Second-Year Students. *College and University*, 83, 45.
- Blustein, D. L. (1992). Applying current theory and research in career exploration to practice. *The Career Development Quarterly*, 41(2), 174–183. https://doi.org/10.1002/j.2161-0045.1992.tb00368.x
- Melrose, M. J., & Reid, M. D. (2001). A quality career centre. *Quality in Higher Education*, 7(3), 207–216. https://doi.org/10.1080/13538320120098096
- Kidd, J. M., & Killeen, J. (1992). Are the effects of career guidance worth having? Changes in practice and outcomes. *Journal of Occupational and Organizational Psychology*, 65(3), 219–234. https://doi.org/10.1111/j.2044-8325.1992.tb00500.x
- Hanover Research (2019). Best Practices in Career Services Measurement: Prepared for New York Institute of Technology.
- Fountain, J, & Newcomer, K. (2018). Developing and Sustaining Effective Faculty Mentoring Programs. *Journal of Public Affairs Education*. https://doi.org/10.1080/15236803.2016.12002262
- Amundson, N. E., & Penner, K. (1998). Parents involved career exploration. *The Career Development Quarterly, 47,* 135–144.
- Wright, A., Roscigno, V., & Quadlin, N. (2021): First Generation Students, College Majors and Gendered Pathways, The Sociological Quarterly, DOI: 10.1080/00380253.2021.1989991

2. **Metanalyses**

- Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior*, 72(2), 254–267. https://doi.org/10.1016/j.jvb.2007.04.005
- Langher, V., Nannini, V., & Caputo, A. (2018). What do university or graduate students need to make the cut? A meta-analysis on career intervention effectiveness. *ECPS Educational Cultural and Psychological Studies*, (17). https://doi.org/10.7358/ecps-2018-017-lang
- Choi, B. Y., Park, H., Yang, E., Lee, S. K., Lee, Y., & Lee, S. M. (2011). Understanding career decision self-efficacy. *Journal of Career Development*, *39*(5), 443–460. https://doi.org/10.1177/0894845311398042
- Rosa, A.D., Vianello, M., & Barbieri, B. (2018). The role of mentors on the development of calling in students: a 3-year investigation.

3. Case Studies

- Cheung, R., & Arnold, J. (2014). The impact of career exploration on career development among Hong Kong Chinese university students. *Journal of College Student Development*, 55(7), 732–748. https://doi.org/10.1353/csd.2014.0067
- Chin, M. Y., Blackburn Cohen, C. A., and Hora, M. T. (2018). The role of career services programs and sociocultural factors in student career development (WCER Working Paper No. 2018-8). Retrieved from University of Wisconsin–Madison, Wisconsin Center for Education Research website: http://www.wcer.wisc.edu/publications/working-paper.
- Hui, T., Yuen, M., & Chen, G. (2018). Career adaptability, self-esteem, and social support among Hong Kong University students. *The Career Development Quarterly*, 66(2), 94–106. https://doi.org/10.1002/cdq.12118
- Childress B. (1998) Advisors Toolbox: Using American College Testing Program Materials to Facilitate Career Exploration by Undecided Advisees. NACADA Journal Volume 18 (1)
- Struefert, B. (2019). Advising Alternatives: A Case Study. *NACADA Review: Academic Advising Praxis & Perspectives Volume* 1(1).
- Nero Ghosal, L., Bullock, M., & Jones, C. (2018, September). The career identity program: Helping students successfully choose their major and create a purposeful career pathway. Academic Advising Today, 41(3). Retrieved from [https://nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/The-Career-Identity-Program-Helping-Students-Successfully-Choose-their-Major-and-Create-a-Purposeful-Career-Pathway.aspx]

- Kawaski, T. (2006). Problems in Career Services at Japanese Universities: A Case Study of Initiatives at Kansai University. *Japan Labour Review Volume 3 (2).*
- Watts, A.G., Hughes, D.,& Haslam, D. (2010). Working Relationships between Career Services Within and Outside Higher Education. *The Journal of Education and Work*
- Bates, L & Hayes, H. (2017). Using the student lifecycle approach to enhance employability: An example from Criminology and Criminal Justice. Asia-Pacific Journal of Cooperative Education, Special Issue, 2017, 18(2), 141-151
- Sloan, V., Haacker, R., Barnes, T., & Brinkworth, C. (2017). Long-Term Impacts of a Career Development Workshop for Undergraduates. Bulletin of the American Meteorological Society Volume 98 (9). https://www.jstor.org/stable/26394325
- Tran, T. T. (2013). Limitation on the development of skills in higher education in Vietnam. *Higher Education*, 65(5), 631–644. http://www.istor.org/stable/23473516
- Lee, K., Lee, H.(2017) Korean graduate students' perceptions of guidance and professional development. *High Educ* 73, 725–740. https://doi.org/10.1007/s10734-016-9988-9

4. Industry Reports

- Dey, F., & Cruzvergara, C. Y. (2014). Evolution of career services in higher education. *New Directions for Student Services*, 2014(148), 5–18. https://doi.org/10.1002/ss.20105
- Shaffer, L. & Zalewski, J. (2011). Career Advising in VUCA Environment. NACADA Journal, Volume 31 (1)
- Lee, J., & Patel,S (2019). An innovating business model for the higher education sector: A platform-based approach to university career services. *Industry & Higher Education Volume 34 Issue (2)*. https://doi.org/10.11770950422219881069
- Zwysen, W, & Longhi S. (2018) Employment and earning differences in the early career of ethnic minority British graduates: the importance of university career, parental background and area characteristics, Journal of Ethnic and Migration Studies, 44:1, 154-172, DOI: 10.1080/1369183X.2017.1338559

Other Sources Consulted.

- Chickering A. (1994). Empowering Life-Long Self Development. NACADA Journal Volume 14 (2).
- Graunke, S. S., & Woosley, S. A. (2005). An exploration of the factors that affect the academic success of college sophomores. College Student Journal, 39(2), 367–376.
- Bates, L & Hayes, H. (2017). Using the student lifecycle approach to enhance employability: An example from Criminology and Criminal Justice. Asia-Pacific Journal of Cooperative Education, Special Issue, 2017, 18(2), 141-151
- Schlesinger, J., O'Shea, C., & Blesso, J. (2021). Undergraduate student career development and career center services: Faculty perspectives. *The Career Development Quarterly*, 69(2), 145–157. https://doi.org/10.1002/cdq.12255
- Taylor, A.R. & Hooley, T. (2014). Evaluating the impact of career management skills module and internship programme within a university business school. British Journal of Guidance & Counselling, 42(5): 487-499
- Jones, J. M. (2007). A virtual world of work: A tool to prepare students for Employability. *Planet, 18*(1), 22–24. https://doi.org/10.11120/plan.2007.00180022
- Wurb, L., Amundsen, W.,Ho Si, A., Bosgoed, M., & Makardajh, A. (2020). The Effect of Increasing Student Involvement with Career Development Services: The Integration of Faculty Members & Fostering Student/Faculty Relationships. *MacEwan University Student eJournal.*
- Watts, A.G., Hughes, D., & Haslam, D. (2010). Working Relationships between Career Services Within and Outside Higher Education. *The Journal of Education and Work*.
- Wade, M. E. (2001). Women and salary negotiation: The costs of self-advocacy. *Psychology of Women Quarterly*, *25*(1), 65–76. https://doi.org/10.1111/1471-6402.00008
- Streit, M., Dalton, J., & Crosby, P. (2009). Campus Audit of Student Affairs- Faculty Collaborations from Contacts to Compact. *Journal of College and Career. https://doi.org/10.2202/1940-1639.1434*
- Kram, K., & Isabella, L. (1985) Mentoring Alternatives: The Role of Peer Relationships in Career Development. The Academy of Management Journal, Vol. 28, No. 1 (Mar., 1985), pp. 110-132. : http://www.jstor.org/stable/256064
- Young, R. A., & Friesen, J. D. (1992). The intentions of parents in influencing the career development of their children. The Career Development Quarterly, 40, 198-207.