









1. Introduction to Project

Employers are key stakeholders in continuing education and training (CET) of workforces. They recognise potential hires' credentials, encourage and sponsor employees' participation in CET, and determine its enactment in workplaces. How employers institute human resource development processes, whether they cover the cost of training or provide support for employees to attend training, determines whether CET happens effectively or at all. Hence, as part of a project on CET provisions in Singapore, 40 employers from various industries were surveyed and interviewed for their views on CET for their employees.

This bulletin is the second in a three-part series, reporting data from the Workforce Development Applied Research Fundfunded project 'Aligning the Polytechnic's Provision of CET with SkillsFuture: Meeting Learners' and Employers' Needs.' This three-phase project began in March 2018 and is expected to end in September 2021. In the first bulletin we reported graduates' perceptions of effective and accessible CET provisions and training. This second bulletin reports findings on what employers consider effective CET provisions, lecturers, and learners.

2. Methodology

Survey and interviews were conducted with 40 employers (i.e., persons in a workplace who have the decision-making power to hire employees) from various industry sectors and occupational areas between March and October 2019. The survey sought to understand what employers consider as effective CET. The interview consisted of open questions that allowed participants to elaborate on their survey responses.

The frequencies of responses were generated using statistical procedures, and interview transcripts were analysed by identifying key themes. For all tables, except Table 5, employers were asked to rank their top three options. This final frequency count is the addition of the frequencies in which employers had chosen that option as one of their top three choices.

3. Participants

Of the 40 employers, 24 are male and 16 are female. The youngest is 21 and the oldest 62 years, with the mean age at 44. Most of them have either degrees or postgraduate degrees as their highest educational qualifications. These employers work in different sized companies, with 14 of them from multinational corporations and 26 of them from small and medium enterprises. These enterprises are in a range of industry sectors, including manufacturing, built environment, modern services, essential domestic services, and lifestyle. They have a range of working experience from less than two years to more than ten years.

Twenty-nine of them have responsibilities for employees' professional development. When asked about their responsibilities in helping their employees remain employable, the three roles they described include:

1. Professional development

- » To develop leadership programmes for young leaders and ensure a clear succession plan
- » To justify training needs and budget
- » To identify training needs and providers
- » To identify learning needs and implement intervention plans

Upgrading of skills and keeping staff updated on industry trends

- » To ensure employees' skills are relevant and current
- » To improve employees' technical and non-technical skills

3. Staff welfare

- » To provide psychological and physical support
- » To create a family-like workplace climate
- » To foster a close relationship among colleagues
- » To ensure employees have a healthy lifestyle and stay fit

4. Findings and Discussion

4.1 Employer Perception on Skill Acquisition

These employers reported that the most common and effective ways to acquire workplace skills are mentorship from a supervisor, followed by mentorship by a more experienced co-worker (Table 1). That these two items are ranked as the top two ways suggests that employers perceived themselves to be using what they believe to be the most effective methods to develop employees' capacities. Regarding externally held training, these employers indicated that while it is a common method, it may not be an effective one. They also asserted that the combination of online courses and engaging in-house trainers in the workplace was effective but not often implemented.

Table 1. Most common and effective ways used by employees to acquire skills

Ways to acquire skills	Frequency (n)	
	most common	most effective
Employees mentored by supervisors in my company	29	29
Employees supported by more experienced buddy	21	21
Employees attended team meetings/team discussions with workplace manager in the workplace	19	16
Employees attended in-house training programs	18	13
Employees attended external training held outside the workplace	14	7
Employees attended external training held in the workplace	13	16
Employees participated in online courses	9	22
Employees attended team meetings with in-house trainer in the workplace	4	13

Together, it appears that these employers value training methods that are contextualised to the work that employees undertake. This finding suggests that CET educators have to be aware of the learner's specific context and customise the course for the learner for the training to be effective. These findings also suggest that there is potential for developing structured learning in the workplace. There seems to be a mismatch between existing educational practices and what is perceived to be more effective in meeting the company's needs. For example, companies can explore the possibility of offering more online courses with content explicitly catered to their employees and engaging more in-house trainers.

4.2 Employer Provision of Support to CET Learners

4.2.1 SkillsFuture Work Study Programme (WSP)

The SkillsFuture Work Study Programme (WSP)¹ was introduced in 2015 to provide graduates with working experience, and at the same time, pursue their next certificate, diploma, or degree. 14 out of the 40 employers work in companies that participate in the WSP. We asked them why their organisations chose to participate in this programme. The top three reasons were that (i) the organisation wanted new employees who have relevant qualifications, (ii) employees needed to upgrade their skills to get promotion, and (iii) the organisation secures government incentives when employees participate in WSP programmes (Table 2).

Two employers referred to a mismatch in expectations between the interns and the company management. They explained that the interns were not adequately briefed about the programme before joining and did not know the nature of the work, salary range, and workload. Hence, there were unmet expectations from both employers and employees. One employer suggested students have internships before signing up for this programme to understand better the industry they will be working for.

Table 2. Reasons for an organisation to join the SkillsFuture Work Study Programme (WSP)

Reasons for joining WSP programmes	Frequency (n)
Our organisation wants to hire new employees with relevant qualifications	16
Employees need to upgrade their skills to get a promotion	16
We secure government incentives when employees participate in CET programs	10
Employees need educational qualifications to perform their duties	8
Employees need to upgrade their skills to better perform their duties	5
On-going training improves employees' well-being	5
Employees need educational qualifications to get a promotion	3

These findings show that employers who engage in the WSP appreciate its benefits but feel the policy for the WSP can be improved to enhance both employer and student experience. Specifically, they suggested implementing an orientation process to ensure that students understand the career options available to them, the terms and conditions of the programme, and their expectations as an employee. At the same time, employers can also be briefed to help them understand the students' needs and how employers can better provide opportunities and support.

¹ The SkillsFuture Work Study Programme (WSP) was initially called the SkillsFuture Earn & Learn Programme (ELP) when it was first launched.



4.2.2 Preferred propositions to support employees' CET

These employers' most preferred way to support their employees' training was to offer full financial sponsorship for the CET course fees, albeit with a bond. Employers are willing to provide their employees with full financial support if it means they would be better able to perform their roles. They also generally show flexibility in allowing time-off to participate in CET programmes and study/exam leave(s) for those who participate in CET programmes (Table 3). This suggests that employers do not mind investing in their employees, so long there are sufficient returns in investment.

Table 3. Employer support for employee participation in CET

Proposition	Frequency (n)
Full financial support for CET programmes with a bond.	22
Time-off work to participate in CET programmes	19
Study/exam leave(s) when they participate in CET programmes	17
Flexible working hours to participate in CET programmes	15
Full financial support for CET programmes without a bond	12
Mentorship programmes	12
Partial financial support for CET programmes with a bond	6
Partial financial support for CET programmes without a bond	5

These findings show that employers understand the importance of training and will support their workers in their professional development. They are willing to offer various options such as full financial support, time off, and flexible working schedules to support their employees' training. However, the accompanying expectation is that after their training, employees will continue to contribute and apply the newly acquired knowledge and skills for a sustained period for the company's benefit. Additionally, even though employers supported time-off work and flexibility to attend courses, many confided during the interviews that a challenge they faced in sending employees for training was finding sufficient manpower to assume these absent employees' duties during peak periods.

4.3 Employer Preference of CET Provisions

These employers valued CET provisions that gave their employees contextualised knowledge and skills that are immediately applicable to their jobs. They were less interested in how CET would be conducted or the pedagogical strategies that would be deployed in the classroom. A third of the participants valued CET provisions that could offer their employees industry-specific knowledge that is up-to-date. As indicated and ranked in Table 4, almost half of these employers report that effective CET provisions should be practice-based rather than merely theoretical. Thirteen employers also valued CET provisions that avail networking opportunities for employees.

Table 4. Desirable skills and characteristics of effective CET provisions

Skills and characteristics of CET provisions	Frequency (n)
Offering an up-to-date and industry-related curriculum	29
Having practical and practicum experiences	17
Having networking opportunities for students	13
Offering group work opportunities	12
Offering effective presentations	11
Having accessible, informative and well-designed learning materials	9
Having work placements in other organisations	8
Having an accessible, usable, and stable IT platform	7
Having lecture video recordings available for students	7
Offering independent examinations	3
Offering class discussion opportunities	2
Giving students autonomy to choose their own assessment topic	2

These findings showed that employers are pragmatic and concerned about the practical benefits of CET. They want their employees to apply what they have learned in the courses directly back to their workplaces. They are less concerned about pedagogy and how the training takes place. This finding is not surprising considering that employers are not educators. However, knowing how adults learn and how CET takes place will help employers better understand their employees' learning needs and better support their employees in their training. It will also equip them with the knowledge to evaluate and choose the most effective CET for their workplaces.

4.3.1 Mode of delivery of CET programmes

Among the most frequent modes of educational delivery were workplace learning and face-to-face, followed by the combination of face-to-face and online learning (also known as blended learning) (see Table 5). These employers were asked to justify their preferred mode of CET delivery and their responses can be grouped into three categories – the advantages of face-to-face delivery, workplace learning, and the flexibility of blended mode of learning.

Face-to-face delivery because of the social value of education (13 out of 40)

- » Ability to gain immediate feedback from teachers
- » Benefit from "class dynamics" and "experience sharing" among classmates
- » Possibility of networking
- » Motivation for learning, if not, it's hard to stay awake
- » Teachers benefit from being able to observe students and receive immediate feedback about their doubts or understanding

2. Workplace learning (14 out of 40)

- » Learning is contextualised to the actual work employees do
- » Employees are able to "learn on the job", "put knowledge learnt into real work situations", "build up working experience", "do their work plus learn at the same time", and learn in an authentic environment
- » It "reduces travel time"
- » Less threatening learning environment compared to a classroom setting

3. Flexibility of blended mode of learning (8 out of 40)

- » Allows for self-directed learning
- » Allows students to "learn at their own time" yet have a "go to person"
- » Allows students to "comfortably learn at their own pace and have space for personal explorations"
- » Preferred blended over fully online classes as they worried that learners may "lose interest and procrastinate"
- » They want employees to reap the benefits of immediate guidance, feedback and mentorship from a teacher, yet also be able to learn according to their own time and interest.
- » Suggested that some parts of education, like assessment, can be done online

These findings suggest that the only delivery mode that employers are hesitant towards is the fully online mode. Perhaps because work is situated and contextualised (i.e., taking place in a specific context and involving specific skills and tasks); these employers propose that workers' training should involve hands-on experience and face-to-face interaction with others. However, a quarter of the employers see the advantages of online learning as it allows employees to learn at their own pace. Nevertheless, even those who support online learning would still prefer that it is combined with face-to-face classes.

4.3.2 Perceived accessible timing

The findings show that many employers perceived that weekday evenings, followed by weekends, were suitable timings for training (Table 5). This was because employers prefer that training does not "eat into work hours." However, they understood the tensions involved as training conducted after office hours eats into the workers' personal, rest, and family time. However, employers in the construction industry prefer weekend classes as they emphasised that their employees need the weekday evenings to rest as their work is "difficult, dirty, and dangerous." One of the more unpopular timing is having the CET lessons three days a week on weekday evenings, a common practice in many polytechnics in Singapore. One employer raised a concern that such an intense learning (and teaching) schedule is ineffective for both learners and teachers.

Table 5. Employers' preferred mode of delivery and accessible timing

Variable	Value	n
Perceived effective mode of delivery	Workplace and face-to-face	23
	Combination of face-to-face & Online	10
	Face-to-face	6
	Online	1
Perceived accessible timing	Evening classes	27
	Weekends	18
	Intensive (Full day training)	14
	Self-paced	14
	Daytime classes	7

These findings show that the first consideration employers have about training timing is that it should not affect employees' performance at work. However, as each job has a unique schedule and workload, the suitability of accessible timing is largely dependent on the industry and company. This suggests that instead of asking employees to make compromises to sign up for existing courses, courses should be designed to match employees' existing schedules for maximum effectiveness.



4.4 Employer's Perception of Trainers and Learners

4.4.1 Effective trainers

The survey showed that the quality of CET trainers employers valued most was having extensive and relevant industry experience. Subsequently, they valued teacherly qualities and skills. Three main themes emerged from the interviews about what these employers considered important qualities of CET lecturers or trainers. These themes corroborated with the survey findings in Table 6.

1. Lecturers should have the relevant industry knowledge

- » 34 out of 40 employers ranked this item in their top three list
- » Able to share personal experiences and real-life examples
- » Need to keep up to date with the industry
- » Be resourceful and have a strong network so that they can always be updated with the latest developments and issues in their industry
- » Insufficient to have only theoretical or book knowledge

Lecturers should have teaching skills such as ability to engage learners and draw on their experiences

- » Be prepared for the lesson
- » Make the effort to study the profile or their trainees and make each session relatable and relevant, using relevant examples and discussion topics
- » Make the class fun, engaging, and make dull topics interesting, especially important as adult students come to class after a long day or week of work
- » Ability to use simple examples to teach complex concepts
- » Make knowledge relevant and applicable to learner
- » Understand the unique characteristics and features of teaching the adult learner that is different from teaching children.

3. Lecturers should have positive dispositions

- » Passionate about the topic they teach and have a genuine interest in it
- » Approachable and patient, understanding that learning takes time and to continue to provide support after the course
- » Having a good attitude and character and being open-minded and a lifelong learner themselves
- » Be open to challenges from students and "keep on learning new things"

Table 6. Desired skills and characteristics of effective CET trainers

Skills and characteristics of CET trainers	Frequency (n)
Having extensive and relevant industry experience	34
Engaging the learners actively and drawing on their expertise and experience	22
Being engaging and interesting in their teaching	22
Having in-depth theoretical knowledge of the occupational field	15
The ability to support learners at different stages of their development	15
Offering learning opportunities for students to reflect and evaluate their own goals and progress	13
Being flexible when students encounter difficulties	6
Establishing and maintaining good relationship with employer	6

These findings indicate that these employers recognise that effective trainers need to be knowledgeable and experienced in their occupational expertise and need to have teacherly qualities and skills. They recognised that being an 'expert' in a specific field does not make one a good teacher naturally. However, they think that having industry experience is a pre-requisite. This suggests that the current system used in many CET programmes of engaging industry experts to work as adjunct lecturers is perceived positively by employers but can be further improved by sending these experts for educational courses to enhance their teaching knowledge and skills. Conversely, for full-time lecturers involved in CET, they would need to maintain industry currency.

4.4.2 Effective learners

In the survey, we asked employers to rank the desired qualities of effective CET learners (see Table 7). The most frequently reported quality that employers propose for employees is that they should be motivated to learn. The second most frequently reported quality is that they should have strong workplace support. The third is that learners should have a lifelong learning attitude.

From the interview transcripts, four themes on what constitutes an effective CET learner emerged:

1. Learners should be motivated

- » Having a genuine desire and willingness to learn
- » Choosing the course on learners' own accord
- » Learners should not be forced to attend a training that they have little interest in or desire for
- » Employers need to "listen to their employers about what they want to do"

2. Learners should be goal-oriented, purposeful and focused

- » Having discipline and time management
- » Knowing why they signed up for the course, the commitment required and being willing to pay the price of their time and energies to complete the course, and thereafter apply what they have learned and reap the rewards of their education
- » Have the "end in mind" and be prepared to be "stretched"
- » Employer to communicate expectations, support that will be provided, and career advancement opportunities prior to the course.

3. Learners should be open-minded and engaged

- » Willingness to contribute and ask questions
- » Be open to new ideas and knowledge
- » Be active participants in the classroom instead of passive bystanders

Learners should have self-awareness, worldawareness and proactiveness

- » Knowing where one stands in the world and looking ahead to see how one can prepare for the future
- » Knowing one's areas of weaknesses and finding out how to close that gap of performance
- » Be aware of how one's job is being threatened by changes in the world
- » Knowing what skills one needs and proactively pursuing it to remain relevant in today's world

Table 7. Desired skills and characteristics of effective CET learners

Skills and characteristics of CET learners	Frequency (n)
Motivated to learn for their professional development	33
Strong workplace support	15
Lifelong learning attitude	15
Disciplined	14
Resourcefulness	13
Good time management skills	8
Independent learner	7
Strong family support	6
Humble attitude	6
Communication skills	6
Aspirational	3

These findings show that the more effective learners are perceived to be intrinsically motivated to learn for their professional development. This means that employees should not be forced to participate in courses. Instead, employers need to know what their employees are motivated by and have a genuine interest in and encourage them to take courses aligned to their motivations and passions while balancing that with the organisation's goals and interests.

5. Conclusion

Overall, the findings show that, unsurprisingly, these employers prefer training that will benefit their workplaces practically and tangibly. Thus, some of them are in greater favour of workplace learning. However, these employers are open to other forms of training as long as that they are contextualised to meet their employees' needs and workplaces. They are also willing to financially support their workers' training if a bond is included. Lastly, they perceived effective trainers as those with industry experience who possess the necessary teaching skills and aptitude; and effective learners as those who are motivated to learn, goal-oriented, and open-minded.

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