

# Skills Development in a Volatile Environment: A Systems View of the Learning Process

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## ABSTRACT

Skills acquisition and development is a vital activity for society. If the latter is subject to volatile operating conditions then this activity becomes, consequentially, more difficult. The requirement to ensure the provision of an adequate supply of skilled personnel at an affordable rate is imperative. This is necessary to guarantee the delivery of services and products for society, ensuring both the level of supply and quality standards allied with development to enhance the future position. Failure in this sphere will lead to stagnation in key sectors, resulting in the decline of the society. This may impact on the technology in use and lead to comparative decline, for instance economically. The requirement to import the vital skills or purchase goods elsewhere, embodying such skills, may incur financial penalties that lead to economic decline.

This paper investigates the skills development required for practice, focussing on the crucial areas of business and project management. A literature review was enacted to ascertain the main themes of the topic. This provided a framework of understanding to utilise in an empirical study. Several interviews were held with a current practitioner, who works for a company that runs international projects. These focussed on the requirements for personnel, in terms of industry demand for skills. A perspective of the current requirements, in respect of education for employability, was therefore obtained. The results are summarised using soft systems techniques, in order to highlight the potential learning in this sphere.

**Keywords:** skills acquisition, skills development, VUCA, leadership skills, team working, soft systems methodology, learning process

## Introduction

The critical factors are the identification and development of skills in the labour force to accommodate volatile operating conditions. The facets of a VUCA environment (Volatile, Uncertain,

Complex and Ambiguous) need to be considered, to develop an adequate response (Bennett and Lemoine, 2014). The counter to volatility is to seek stability, so areas that will endure in terms of economic performance and, hence, the demand

for appropriate skills, need to be targeted by appropriate development policies. The response to uncertainty is to try to establish a sure position, so acquiring skills that are always sought or a range of skills, giving an element of contingency in the case of uncertain conditions, is a suitable response. Information needs to be gathered to make these decisions. Complexity needs to be addressed and simplification is perhaps the most useful action, with an interpretation of complex trends being resolved to the identification of 'skills gaps' in key areas. The response to ambiguity is to clarify, so 'information gathering' mechanisms are needed, to inform policy makers and participants, thus enhancing decision-making in this sphere of training and education. An informed appraisal of the operating environment is thus required. This will involve the construction and use of information systems, to acquire and filter information to inform key policy decisions. The required skills in this volatile environment, complicated by the global health crisis, need to be discerned. A means to actually develop such skills should be identified, in order to ensure the selection of appropriate candidates for training and development of suitable mechanisms to impart the necessary skills. Guarantees of standards need to be established, so that the supply of qualified staff is assured, in terms of entry and exit standards. This will allow employers to recruit suitable staff and provide entrepreneurs with the requisite skills to foster development in all sectors. Suitable methods to teach the future and current workforce the new skills should thus be established. The 'reward' is economic and social development, with more value generated internally, in respect of products and services. This may also lead to an improved international position, with a possible contribution to the global market in outsourced services (estimated at around \$92.5 billion in 2019 (Mazareanu, 2020)). Development of skilled personnel in key areas is also paramount – with IT, Healthcare, Logistics, Engineering and Construction, for example, continuing to be vital sectors, despite the legacy of the global pandemic and consequent economic effects.

## **Problem Statement**

Gaps in knowledge are present in current qualifications, for example operational risk management and sustainability.' The respondent identified important areas of expertise that are absent from many current qualifications. These included the practical application of risk management, namely identifying and assessing key risks then introducing measures to mitigate them and provide contingencies for assuring effective learnings as it determine the operational efficiency. That is why every institutions are encouraging to endorse the skill based learning and communicating through case. The determination of feasible sustainability actions, in respect of the environment and business, were also included in this statement. These key points are addressed in several publications (such as Blair, Woodcock & Pagano, 2021; Blair & Pagano, 2021b).

## **Research Objective**

The research aims to present systematic view of the learning process for skill development in a volatile environment.

## **Methodology**

A review of the literature was undertaken, encompassing important journals. The main themes were identified and organised into categories for this topic.

The empirical work comprised an analysis of several semi-structured interviews with a manager, who works as a director for a company that runs international projects. The aim was to obtain information regarding the demand for skills in the employment market. The key themes were extracted from the interview record, using a grounded, inductive approach. This entailed the formulation of the coding categories as this information was processed (Easterby-Smith et al.,1991).

The themes identified from the interview were then compared with the findings from the literature, in order to enhance understanding in this area. A framework was formulated, as a summary of the main aspects of this area (as per Blair et al.,

2019). This could provide an aid to understanding and assist with further research in this sphere. Soft Systems Methodology techniques were utilised in order to organise the results of the research (Checkland and Scholes, 1990). A 'systems' framework was constructed as a summary of the knowledge acquired from the study. The principal inputs, processing and outputs in the environment were, hence, identified. This 'process-based' approach matches the techniques employed in business and project management, in order to comprehend the work areas.

### **Literature Review**

Several of the main journals were reviewed for contributions on this subject. The area of investigation was skills development, primarily focussed on business and project management. A thematic analysis was employed in order to obtain the principal points within this sample of the literature. The objective was to provide a context to assist in the empirical study, namely interviews with a practitioner on course design for employability. A summary of the sample of literature is presented.

### **Current Trends**

The prevailing trends in project and business management are considered, in order to discern the future demand for skills. The need to develop key skills to manage complex projects and projects enacted in complex environments are considered (Floris and Cuganesan, 2019). The ability to manage resources to deliver the project, via encouraging dialogue between important stakeholders about critical issues, is paramount. Stakeholder expectations need to be managed and communication mechanisms utilised, in order to deliver project outcomes. Knowledge of best practice is needed together with the ability to analyse and resolve issues to make progress with complex challenges. The ability to manage resistance by identifying and accessing a range of power sources and utilising them to resolve issues is also vital. Traditional requirements to deliver prescribed project outcomes then negotiate success for stakeholders, based on a mutually constructed concept of value, are important here. This is based on research from Australia into complex projects.

The new approach to project management has developed by embracing an international perspective (Picciotto, 2019). The difficulty of planning in uncertain, complex environments is reflected, undertaking this review of the academic literature. The requirement to consider outcomes beyond the final results, regarding project impact is emphasised. The ability to utilise experimentation to permit adaptation of projects, to maximise success in terms of the intended consequences is critical. Traditional evaluation criteria should be discerned, namely achieving the designated objectives efficiently, and then be extended to enhancing positive societal and environmental impacts. The ability to select and engage suitable partners then assess their contribution to improve collective impact, is identified as an important skill. Using a multi-disciplinary approach to projects is important to maximise the prospects of success and the scope of such projects. The skill of evaluation and capacity to engage and incorporate independent evaluation is another vital component of this new project management 'movement'.

The need for innovation in business is discussed, in order to transition from an incremental to a more radical approach (Furr et al., 2019). This will create new business forms and mechanisms via disruptive creativity in the various sectors. The danger of established approaches is that they tend to be confirmatory, in terms of reinforcing the established position and existing beliefs. Tactics to encourage creativity are outlined, such as using examples from other areas and challenging the status quo by deconstructing the existing scenario and trying to develop a new approach. The skill development here is to establish creativity in the form of entrepreneurship and more agile techniques, where process innovation is employed to deliver assigned objectives (also, as per section 3.7 below, comprising a discussion of workplace productivity).

### **Hard and Soft Skills**

A basic definition comprises dividing the areas of learning into 'Hard' and 'Soft' skills. The type of learning can be categorised as 'defined'

and ‘adaptive’ or ‘experiential’. ‘Hard’ skills are primarily technical and can be taught using defined methods and courses. The entire skill can be learned at such courses and completion can be via producing a professional or academic assignment or sitting an examination. This, hence, comprises learning a defined skill to an agreed standard. This form typically produces a qualification or certification to show that the candidate has achieved the required result. The entire skill can, thus, be imparted by the course. ‘Soft’ skills are related to people, thus need to be acquired by experience and this learning may only be valid in a particular context, contrasting with ‘hard’ skills which are typically accepted for general use. An accounting qualification is an example of developing a ‘hard’ skill, via examination and certification to established standards, whereas managing a department, including all of the accompanying power and political issues, is an example of a ‘soft’ skill with learning occurring in an adaptive, experiential manner, developing knowledge which may be specific to a particular context, such as business or company. The acquisition of a qualification may only comprise the achieving of the entry-level criteria for the profession. The extent to which that qualification is useful and the individual progresses in terms of their career may be wholly dependent on their developed ‘soft’ skills, exhibited in their dealings with personnel encountered in their working sphere. Most activities will involve some combination of the two types of skills, with the balance determined by the nature of the activity. The development of a plan, for example, can be a skill acquired by a taught course, in a real or virtual classroom. The final form of a business plan may need to incorporate the views of key stakeholders and may be subject to negotiation with them, requiring considerable aptitude in dealing with these individuals and groups together with knowledge of the specific context. The negotiation of a contract, for example, may require technical skill in understanding and contributing to the form but will also require skills in forging agreements with the key parties, to create and obtain consensus on the final document. Basic ‘soft’ skills can be

developed, to some extent, via role playing and simulation, however, it may be impossible to replicate particular business contexts and the full range of skills required by an individual. These can only be experienced via practical application in the specific business context.

The optimum position is, therefore, to have the required technical skills and develop the ability to apply them via the use of interpersonal skills. This emphasises the need for a practitioner approach to learning. An individual’s competences can, thus, be broadly categorised into: Intellect (IQ); Emotional (EI); Self-Management (such as resource management, organisation and communications). The aptitude of the individual and compatibility with the various professions is thus determined by the competences in these areas.

### **Leadership Skills**

The requirement for the identification, acquisition and development of managerial competences is necessary for project managers and leaders (Muller and Turner, 2010). The standard individual competences are needed – but applied to a wider focus for the area of responsibility and assigned staff. The intellectual ability should include critical analysis of the topic area, a strategic perspective and, possibly, imagination and vision, to develop this area of business and gain new perspectives in its delivery. The competences associated with emotional intelligence should include empathy with the staff, resilience, sensitivity and cultural awareness (Fisher, 2011). The ability to influence and motivate should also be present. Managerial competences should include resource management for the area of responsibility, communication skills with the ability to develop and empower staff. Skill in managing and resolving conflict should be present, with the capacity to understand the situation, including behaviour, relating to the conduct of the business.

Leaders need to know how to adopt different roles, according to the circumstances in practice. This entails skills that can be acquired via courses, qualifications and practical experience (perhaps with a tutor or mentor). Leadership roles can be

very directive (micromanagement) and a more supportive role, where staff are left to perform their tasks without intervention (Hersey and Blanchard, 1969). The different roles can be characterised as four distinct areas: directing, where the staff receive direct instructions to perform tasks in a prescribed manner and have little discretion in the manner; coaching, where the staff are given instructions and feedback on their performance of the task. The aim is to develop the latter to a higher level; supporting, where the aim is to facilitate the staff in the performance of the task and ensure appropriate resources are available. High discretion is afforded in terms of task performance; delegating, where the staff are empowered to perform the task without intervention. Responsibility is devolved to the staff member. The circumstances, nature of the task and business environment, as well as the competence and character of the manager and staff members will determine the method chosen (which could change due to circumstances) and ultimate results.

Leaders may possess or adopt different styles, requiring different characteristics, to deliver the required results (Ancona et al., 2019). Types of leadership comprise: Entrepreneurs; Enabling Leaders; and Architects. 'Entrepreneurs' have self-confidence and are willing to act and possibly take risks. They have a strategic mindset, considering a broad remit and how to exploit it, as well as an ability to attract others to enable their initiatives to be enacted. 'Enabling leaders' are able to coach and develop staff and excel at building and using networks to connect with key personnel. 'Architects' take a strategic view, perhaps considering the long-term environments. They are prepared to make big changes, often embracing disruptive innovations or restructuring organisations to create future success and resilience. Recognition and development of these characteristics is essential for producing future leaders in all sectors of society.

### **Team Working**

The ability of individuals to adapt and contribute effectively to team working is a vital skill. Many employers look for this as the most important aspect of recruiting new staff, after the basic qualifying

criteria have been met. Skills acquisition should involve the development of team working skills. The ability to adopt different roles in teams at work and contribute effectively to team performance is a vital area for all personnel. Most job roles involve different levels of team working, with employees assigned to several teams throughout the organisation. The pandemic has exacerbated this need, with the further requirement to acquire the skills of online collaboration to overcome the restrictions in movement, in order to allow business continuity and subsequent embedding of homeworking into working practice (Clark, 2020).

There is a considerable amount of research into identifying and developing team roles. A recent source is considered, outlining four main team roles: Pioneers; Guardians; Drivers; and Integrators (Johnson et al., 2017). 'Pioneers' are risk-takers and are attracted to new ideas. They consider the strategic picture and have entrepreneurial qualities. 'Guardians' value stability and order. They view learning from the past as a key facet in terms of development. 'Drivers' embrace challenges and tend to have a polar view of issues, judging them as 'right' or wrong'. 'Integrators' are the team facilitators. They value team working and collaboration. Their aim is to broker agreement among the team members. This research proposed that team under-performance is because the different combinations of types are not being managed properly, or the balance between them is incorrect. All of the personnel, who may exhibit characteristics of several types, have a contribution to make to the team outcomes. The problem is that different styles and personalities may lead to conflict among the team members. The solution is to try to reconcile the differing views and ensure all members are valued and are granted the opportunity to make an appropriate contribution. Team members who possess several styles can help in reconciling the team and eliminating the conflict to gain a consensus. The most effective teams have good systems of control and attend to both the team output requirements and the development needs of the individual members.

### **Portfolio Approach**

Evidence is of a current and future skills ‘gap’ in organisations (for example technology-based) that may inhibit future development. Learning also needs to be applied, so the importance of learning from experience and being able to put into practice learning gleaned from the classroom (physical or online) is increasingly important. The accumulation of skills to enable job performance is now viewed as a career-long activity, rather than a prelude to employment. A portfolio of skills is required and these need to be developed, enhanced and increased to a wider remit, throughout an individual’s career (Moldoveanu and Narayandas, 2019). There is a stronger emphasis on online delivery of learning that even some of the most traditional institutions have embraced. This trend has been accelerated by the global pandemic, which has promoted the virtual learning environment over the physical classroom. The notion of the ‘personal learning cloud’ was proposed. The learning is delivered by multiple providers and is personalised, in respect of being tailored to the individual and their development requirements. The aim is to socialise with others via networks, which allow support and further learning to occur. The learning should be focussed on development in a professional context and can be authenticated, with the validating provider being capable of being tracked from this personal learning portfolio. The funding of this learning can be from several sources, public or private sponsorship, student loans and apprentice arrangements, for example.

### **Levels of Progression**

Progression in skills acquisition is demonstrated via experience and the ability to perform at certain levels (Cicmil et al., 2006). The individual is given or assumes appropriate responsibilities, to match this level. An example of this is demonstrated by research into progression via experience for project leaders. The range of different levels spans basic, namely the ‘Novice’ level, to advanced, termed the ‘Expert’. The ‘Novice’ relies on rule-based solutions, so a set of instructions has to be followed to make decisions. The ‘Advanced Beginner’ uses ‘trial and error’ to make decisions based on

experiential methods. The ‘Competent’ project leader prioritises procedures for decision making, so can add order to experience. The ‘Proficient’ project leader understands the context so can reflect and analyse the situation to produce decisions. The ‘Expert’ relies on intuition and rational process, based on extensive experience. The latter is able to go directly to a good solution, using knowledge and skills. The aim in skills acquisition and development is to obtain these skills via experience to reach the ‘Expert’ level. This may have to occur many times, as new skills and areas of practice are encountered, that invalidate former knowledge.

### **Creativity**

The importance of recruiting and fostering creativity in the work environment is identified (Kellerman and Seligman, 2023). Several types of creativity are mentioned: integration; splitting; figure-ground reversal; distal thinking. ‘Integration’ is showing that apparently different entities have a level of similarity that could permit configuration. The example utilised is the mobile smartphone, combining camera, internet access, music players with telephone communications facilities. ‘Splitting’ is dividing entities into several parts to achieve enhancement. An example is that of a factory production line, enabling division of labour and efficiencies of scale. ‘Figure-ground reversal’ is based on being able to reverse focus in order to obtain a novel perspective. The example of using two points on Earth to track a satellite was given. It was realised that this could be reversed so that satellites could track points on Earth, leading to the creation of the Global Positioning System. ‘Distal thinking’ comprises the use of imagination to consider a radically different future, such as the ‘self-driving’ car.

The recommendation was that teams should contain members who could be creative in several of these different ways. This will facilitate problem- solving, including the creation of new products, services and techniques, which could advance the organisation in its environment. The optimum mix of these different types of creativity is required on the team, as determined by the work topic, organisation and its context.

The need for innovation in different areas is acknowledged, in the post pandemic era. The digitisation of society, accelerated by the restrictions on the movement of populations in order to prevent the spread of COVID, is cited as an example of a discipline requiring new theories to assist analysis, rather than continuing to utilise existing theory (Grover and Lyytinen, 2023). The bias towards the latter tendency was discussed, considering the publication of a sample of articles on this topic by the major academic journals. The need for this novel theorising to inform the IT discipline is therefore stated. This reinforces the requirement for recruitment and development to include creativity within its remit.

### **Employee Value**

The retention and recruitment of personnel can be effectively addressed by an holistic consideration of value, offered to employees (Mortensen and Edmondson, 2023). This is defined as comprising several elements offered to staff, namely material, development, community and purpose. The proposition was made that if the emphasis was chiefly on the material aspects, usually remuneration, then this was likely to only have a temporary effect. The offer of potential employee development, such as training and career progression programmes, would be more attractive on an individual level. The offer of collective value, such as a supportive workplace network or community, and an attractive purpose, such as providing an important service to society, would also be more important and, potentially, longer term in effect.

The problem of retaining a wholly online mode of working, in the post pandemic time, was highlighted. This could suit individuals and allow them to be effective but may affect collective performance, due to inhibition of mentoring and team interaction. The need for some co-located working to enhance these activities was thus suggested.

The match between people and the organisation (termed POF, Person-Organisation Fit) can be considered, in respect of Business Model

Innovation (Menter et al., 2022). The Business Model comprises the configuration of resources that the organisation employs to deliver value. This research concluded that incremental, evolutionary change to the Business Model did not materially affect the POF and may even lead to improvements in this factor. Major, revolutionary change to the Business Model, however, caused a decrease in POF. The match between the employee and organisation depends on such elements as skills, development, socialisation, career aspirations. Incremental change in the organisational context could improve the match between people and organisation, as it is likely to be informed by the workforce and their requirements. Major change, for a strategic or operational reason, is more likely to have been initiated by external considerations, such as a new market, product or system. This could then lead to new skills being required, new workgroups, some jobs being made redundant and changes to personal development and career aspirations. This was found to have a negative effect on the POF. The importance of recruiting appropriate staff, with potential for future development, is thus emphasised. Employees and potential employees should also try to match their skills and personal characteristics to the organisational requirements and try to develop in accordance with projected future strategy and personal aspirations.

### **Results and Discussion**

Several interviews were conducted with an industry practitioner, based on the identification of the learning process, in respect of a project and business management course. The relevance of formal academic qualifications to practice was considered. The measures required to enhance the employability of graduating students, via course design, were obtained. The results of this empirical study analysed and codified into themes.

### **Perspective**

The perspective of courses was questioned by the respondent, who stated that the 'organisational lens is missing from degrees'. These qualifications should consider the requirements of organisations and actively prepare the students for them, via

the degree teaching content. This will align with graduate employability objectives for educational institutions.

The need for flexibility in studying and obtaining qualifications is stressed in the literature, in the form of the 'portfolio approach' to learning (Moldoveanu and Narayandas, 2019). This will allow workers to acquire skills whilst still working and being allowed to study part-time and virtually, for instance, in a more accommodating manner.

### **Skill Levels**

A fundamental skillset is required for students, to enhance their employability. 'People need basic skills, such as writing emails', as stated by the respondent. This should be considered as part of their education. The course content, including formative and summative assessments, should, therefore, be designed to ensure students have these basic business skills. Attainment of the latter should, especially, be considered in the assessment of the students, thus encompassing grading, including passing the qualification. The levels of progression attained by project managers are considered in the literature, for example (Cicmil et al., 2006)

### **Flexibility**

'Work experience would benefit students'. The use of 'sandwich' courses to provide a year of placement with an employer with an assessment and monitoring process, managed by the employer and personal tutor is recommended. This will permit the student to glean valuable knowledge of and confidence in a work environment.

This is highlighted in the academic literature, for example in discussing the portfolio approach to learning (Moldoveanu and Narayandas, 2019) and the research journey (Blair & Pagano, 2021a).

'Hybrid work requires more trust, self-organisation and new techniques.' The move to virtual working at home, during the restrictions of the pandemic, has led to the evolution of work. Many organisations now use a hybrid model, comprising a mix of working at home and the office. This has

placed new requirements on employees and led to the creation of new working environments. The requirement for virtual learning and working in virtual teams is also noted in the academic literature (for instance, Blair and Pagano, (2021c) and Blair, G., & Pagano, R. (2020)).

### **Application to Work**

'Operational project management in a business environment is needed.' The practical element of project management should be the focus of courses, using a business context as illustration. This will help students to understand the rationale, tools and techniques that can be applied in business, as well as the potential environment. This will assist in preparing them for practice and hence help them to be 'work ready' candidates for employment.

The capacity to produce solutions to work issues was mentioned. The need to communicate effectively and be able to manage people and situations to get the desired results was also emphasised. 'Soft skills and problem-solving ability are needed', according to the respondent. These are vital areas for students to perform, effectively and, hence, show their potential to contribute to a work environment.

The respondent suggested that many employers seek to 'recruit potential and train to be effective staff. Candidates need to fit in as well as have required skills and qualifications.' The necessity of hiring employees with the potential aptitude for the job then providing training in order to attain the requisite level of expertise, is proposed.

Articles on project management (Blair, Barratt, Pagano, 2022), creativity in employees (Kellerman and Seligman, 2023) and teamworking (in a virtual environment, Blair & Pagano, 2020), for example, reflect some of these themes.

### **Mentors**

'Mentorships should be used, giving students access to a pool of workplace professionals to make work-ready.' The suggestion was made by the respondent that an arrangement with suitable organisations be enacted by educational institutions. This should allow students to receive guidance from employees,



in respect of the work environment. This comprises a mentor relationship, with the students' academic education being supplemented by input in the practitioner sphere. This will enhance the provision of education in business degree subjects. These areas are discussed in the literature, for example in respect of research (Blair & Pagano, 2021a) and skills development in public sector organisations (Blair, Barratt & Pagano, 2022).

## Discussion

The main aspects of the 'Learning Process' are outlined, utilising a systems approach (as per Diagram 1). Soft Systems Methodology techniques were employed to organise the principal themes from the research (after Checkland and Scholes, 1990). This is based on the example of creating a Masters-level course in business or project management at an educational institution. The main inputs were identified, such as: funding; learning technologies; libraries; classrooms (which could be virtual); tutors; and students. The learning process was the main activity, comprising a collaboration between students and tutors, in the educational context, with inputs from the employer to achieve the main outputs, which include a defined standard of learning, knowledge and qualified, employable graduates. The context that regulates and sustains this educational process is the education system and institute, global and local environments and, ultimately, society. The premise is that education

can provide socially-useful graduates, who can be readily employed. The employers also participate in this system, providing workplace mentors, work experience and access to technical and office skills. They could perhaps also provide funding and a direct route for graduate employment. The main course topics were suggested as: leadership (Blair & Pagano, 2020); creativity (Kellerman and Seligman, 2023); teamwork (Blair & Pagano, 2020); risk (Blair, Woodcock & Pagano, 2021); contracts (Blair, Woodcock, Pagano, 2022); strategy (Blair, Barratt & Pagano, 2021); technology (Blair, Grant & Woodcock, 2020), (Blair & Pagano, 2023); the environment (Blair & Pagano, 2021b); and project management (Blair, Barratt & Pagano, 2022). Examples of the literature are cited with these topics. The 'Learning Process' is thus defined in terms of a systems approach. The delivery format should be flexible, permitting different forms of learning including full and part time, virtual and in-person, synchronous and asynchronous, in order to accommodate different learning styles.

Learning comes from context along with content. In most of education system the lacking part founds to be correlation between context and content. Which needs to be improvised. The concept might be more significant in case of Nepal as per quality assessed by Mishra and Jha (2023), Mishra (2023), & Mishra (2022), assured the intervention is most for quality learning in Nepal also.

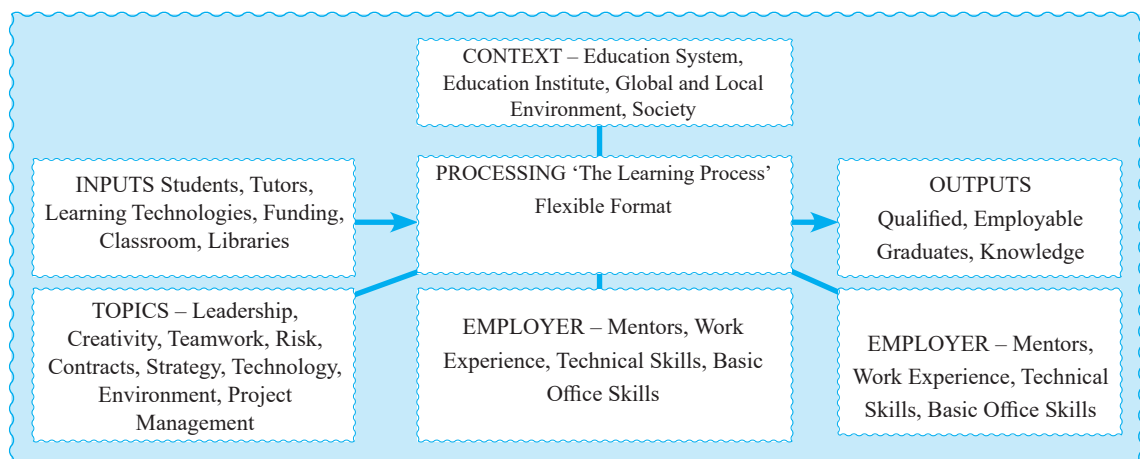


Diagram 1: Learning Process

## Conclusion

A thematic analysis of key literatures on skills development was undertaken and a framework, illustrating the main elements in the learning process, was constructed via an empirical study, in order to summarise this area in the form of a systems diagram. The importance of the skills development process, as being critical to successful organisations and society, was emphasised. This research could be further developed with future empirical studies in a range of sectors, analysing the skills development process.

The learning process excellency could be brought through the enhanced integration of inputs, context, outputs, topics, employer together as a process. Therefore, learning process should be taken is system approach, where the delivery format should b flexible, permitting different forms of learning including full and part time, virtual and in-person, synchronous and asynchronous, in order to accommodate different learning styles.

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