

## Unit 2: Preparing your organisation for PBL: Developing a learning culture



### Introduction

*“The ability to learn faster than your competitors may be the only sustainable competitive advantage” (Senge 1994)*

In order for PBL to succeed in your company learners must be encouraged and supported. A culture of learning needs to be fostered. Senge, 1994, defined a learning organisation as a place "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together."

In our research many companies expressed the desire to implement a culture of learning and self motivation (or self directedness as it is known in the field of learning). The Archimedes project reviewed literature and best practices in fostering a learning culture. Learning culture is a complex process. To assist companies to implement a learning culture we have selected 6 key characteristics from our research to be considered in an organisation wishing to introduce problem based learning. (Duden, 2012; Gill, 2009; Gaile, 2013; Senge, 1994; Garvin, 1985)

**Supplementary Video Resource**  
<https://youtu.be/vc2ruCERTok>

This unit is structured in 6 lessons to build the characteristics required for your organisation to develop a learning culture

- Lesson 1: Building trust and communication and support
- Lesson 2: Articulating mental models and transparency of decision making
- Lesson 3: Encouraging systems thinking
- Lesson 4: Developing self directed learners
- Lesson 5: Facilitating collaborative learning and creating opportunities for reflection
- Lesson 6: Critically evaluating your organisation and assignment

In each lesson you may be provided with additional reference material for further reading if you wish to gain more knowledge of the area. There will also be tasks to complete in some lessons to provide you with opportunities to apply what you have learned in the workplace. At the each of the unit there will be an assignment for you to complete which is related to what you have learned.

### Lesson 1: Trust, communication and support

For a learning culture to be successful individuals must be seen to be valued in the organisation. They must be encouraged to share and try new ideas. To allow individuals to do this they must have a sense of trust and support.

To build a trust the company as a whole must:

1. Tolerate mistakes as part of learning
2. Respect each other
3. Identify that asking for help is not a failure
4. Be empowered
5. Build relationships
6. Have open communication
7. Keep promises and commitments
8. Lead by example
9. Be supportive

**1) Tolerate mistakes as part of learning.** If there is an environment in which employees will not try new ideas for fear of failure and its consequences it will inhibit the learning culture. Management and employees must be open to discussing mistakes and learning from them. It is important to emphasise to staff that mistakes are an inevitable part of learning and are acceptable as long as employees have a strong rationale for making these mistakes.

To encourage this it should be pointed out that suggestions for changes and improvement are not criticism but opportunities and rather than criticising people, staff should be encouraged to look at mistakes from the perspective of work practices.

An example of an effort to tolerate mistakes is identified by Prof Amy Edmonson . The initiative is known as 'Blame free reporting' which allows employees to report any observation of mistakes or practices that might not be going well free from penalty or blame (see Amy Edmondson, Harvard Business school)

**Supplementary Video Resource**

<https://youtu.be/IUP4WcfNyAA>

**Task**

Develop the content for a briefing session which informs employees in your department the importance of mistakes and risks as part of learning, how and when they will be tolerated and how they will be exploited as opportunities in your department.

- 2) **Respect each other.** It must be emphasised to employees the importance of treating each other with respect, listening to peoples views even if you do not agree. Instances where people do not treat each other with respect must be reported and reprimanded. Encouraging empathy and communicating this to employees is important. Furthermore employees must be encouraged not to jump to conclusions and to observe, understand and listen to other people. Trainers and management can lead by example listening to everyone's opinion in meetings and 'hearing peoples side of the story'

**Supplementary Video Resource (also relates to mental models lesson 2)**

<https://youtu.be/KJLqOclPqis>

**Task**

Develop an initiative to foster respect in your organisation. Outline how this will be implemented and articulated to staff.

**3) Highlight that asking for help is not a failure.**

**Supplementary Video Resource**

<https://youtu.be/5qASnT9axfk>

People have different strengths, work at various speeds and need support in different ways. The fact that we are all diverse must be emphasised to staff. It must be articulated to employees that everyone should look for ways to help each other and seek help. However care must be taken so that staff do not exploit this. It must be highlighted that the necessary direction will be given to support staff. However that staff are ultimately responsible for the completion of their own work. In exceptions where staff are burdened with a large workload efforts will be made to assist this.

**Example**

Where an employee is struggling to access the information necessary to help them to complete a project task a manager may direct them to the person who has this information. Where an employee has three work packages on a project due simultaneously a manager may provide them with the resources to help them complete some tasks on the work package

**4) Empower People.** For people to trust you you must trust them. By giving staff the authority and responsibility to make effective decisions around their job you are showing that you have confidence in them and that you see them as skilled and competent. This allows a reciprocal relationship to be developed. If staff have to seek permission to complete parts of their job that they already have the expertise to do themselves you are saying that they are not capable.

**Example**

If a buyer has to seek approval through a long tedious process from a manager for every purchase over 1000 euro. They may decide to only purchase the necessary amount of materials to a value under this even if by bulk buying material they will receive a discount and spread the delivery costs associated with it. By allowing the employee to purchase to a higher value without approval you are trusting the employee to use their judgement on other factors such as discounting, delivery costs and product demand

**Task**

Identify any work practices in your department that inhibit a competent person from doing their job effectively and how you could delegate adequate responsibility to them to ensure their trust and make their job easier.

Or

**Task**

Develop a memo requesting all staff to identify any work practices that inhibit them from doing their job effectively and what measures may be implemented to allow them to do their job more effectively.

**5) Build relationships.** Often in a their professional role individuals behave very differently than they do socially. In addition everyone has personal circumstances and responsibilities that as working colleagues we may not be aware of. To build relationships it is important to have a personal element to work. Have a regular scheduled coffee morning or staff night out to get to know peoples on a personal level.

**6) Open Communication** - . Communication must be both both top down and bottom up. Managers and trainers must communicate in an emphatic manner the importance of each employee to the organisation and the importance of employees to share their ideas. In addition you must communicate to your employees what is going on in the organisation and what decisions are being made. Involving people in decisions or informing people of what is happening is a way to win employees over. This may be done by

- Making a habit of dissemination – holding a monthly briefing meeting or sending out a weekly email to inform staff of what is happening in the department
- Holding a monthly meeting to allow employees to raise issues that occur in the department and brainstorm how to address these. This involves listening to employees even if you don't agree.
- It is important to communicate openly and honestly with employees, without distorting information. People hear rumours and can read situations very well. It is important that for them to be truthful with you that you are honest with them. They will respect you more for it and are more likely to be open with you.
- Giving employees regular feedback on how the department is functioning and how they are doing in their job
- Having an open door policy. Emphasise to employees that you are there to listen to any grievances they may have no matter how small
- Sharing experiences. Trying to relate to your employees situation. Share your experiences in a similar situation where relevant

### **Task**

Develop a communication plan for your department that allows top down and bottom up communication, circulate it to your staff explaining the rationale for the plan and asking for feedback and suggestions.

7) **Keeping promises and commitments.** We all know someone, Joe Bloggs that said he would have the order for you tomorrow at the latest for an important customer but fails to deliver and return your calls? Would you trust him again?

To ensure trust remains do not make promises or commitments you cannot keep and if you do please see them through.

8) **Lead by example** – the key to all of the above is to lead by example. Listen to people, be respectful, if someone makes a mistake do not jump to conclusions given them a chance to explain and try to turn it into something positive, have weekly meetings, attend coffee mornings, give people the responsibility they deserve and ask people how they are.

### **Task**

Make a list of positive things you will do to set a good example to other employees

9) **Support** – People should be supportive of each other. There should be positive reinforcement from leaders. It should be emphasised to employees that any ideas or suggestions are not criticisms but opportunities. Rather than criticising individuals, staff should appraise and evaluate work practices. Extra efforts should be recognised and made public within the organisation

### **Task**

Develop a plan of how you propose to assist your employees to identify opportunities for improvements and support them to execute these opportunities

## **Lesson 2: Articulating Mental models for decision making**

A mental model is a set of rules of how the world works and what we need to do to be successful. Each person in your organisations has in their mind a perception of how they do their work correctly. In addition when a person undergoes a new task they aim to develop a mental model of how they will go about this. It is important that to build a learning culture and one of continuous learning individuals look at their mental models and critically examine them.

Often they are perceived as a set of 'norms' and people are unaware of these. These norms, rules or

ways of doing things need to be extracted e.g. For example when a person drives a car what are the rules and tasks that they apply to do this correctly?

Mental models involve the learner explaining their thought process around making particular decisions or their thought process about how the solution will work and why. It is basically articulating how and why they made a particular decision or implemented a solution in a particular way. Learners must be taught how to identify their mental models as they may contribute to the organisations success

### **Supplementary Video Resource (also relates to lesson 1)**

<https://youtu.be/KJLqOclPqis>

Often in learning it is not the final decision but the approach taken to reach that decision which is the most beneficial. For example a company might decide to set up a distribution centre in a particular location. The thought process behind how and why they made that decision and implemented it can be applied to another similar instance within the company in the future.

Another example may be if a machine operator has low defect rate and high output due to the machine settings they choose the benefit is not what machine settings they use but why they choose to set the machine in that way at any given time.

Similarly for a service environment if an insurance broker has a low churn rate of customers without offering excessive discounts how does this broker interact with existing customers.

To improve trust and reduce the perception of 'blame' staff should be encouraged to reflect on the information they use to make decisions, if this information is reliable, how they can apply it and what process they can undertake to reach decision.

In the organisation this can be done by asking the learner/team to reflect on the below before and during undertaking a a project or a major task:

- Have they undertaken a similar task before?
- If so was it successful and why it was successful? What measures were applied to ensure its success? Can they be applied in this instance
- If it was not successful why not and what can be improved and applied to this situation.
- What process they will undertake to address the task,
- Why will they do it in this way, what assumptions are being made?
- Why are these assumptions being made (what data or information are you basing these on),
- What data knowledge or rules are they going to apply, why,
- what problems do they foresee,
- how they will overcome these,
- do they think their approach will be successful, why/why not

### **Task**

Create your own mental model: Identify a major project or task you recently undertook

- Had you undertaken a similar project/task previously?
- If so did you try to relate what you had learned to that project/task? How?
- Identify
  - What steps you undertook to complete the project/task?
  - What data, knowledge or rules did you apply/use?
  - What assumptions did you make? Were they correct? Why/why not?
  - What data did you base these assumptions on?
- What problems did you encounter?
- How did you overcome them?
- Was your approach successful? Why/why not?

## Lesson 3: Systems thinking

### Supplementary Video Resource

<https://youtu.be/HOPfVVMCwYg>

*"Because we learn best from our experiences but seldom experience the consequences of many of our important decisions, we typically look for actions that will produce solutions in a relatively short time frame<sup>1</sup> "*

All too often in companies, particularly larger organisations staff are concerned with their own work practices. Each department has their own performance metrics to achieve and functions are concerned with reaching these targets. Employees should be encouraged to examine how their work and practices impact other areas of the organisation. They should be motivated to work as part of a team to understand these impacts and reach cohesive solution that does not cause problems for other areas.

In addition when encountering a problem, rather than trying to immediately identify a solution it is important to spend time understanding why these problems come about.

### Example

A sales department might have a target to achieve a certain number of customers , to do this they might to promise the customer the a number of new product features, additional warranties and discounting however this may not be feasible from a production or financial perspective.

Employees must be encouraged to work in cross functional teams to identify what changes could be made to improve their practices and achieve a balance between performance metrics and overall organisational harmony. Problem Based Learning can encourage this.

Other measures you can take is when allocating a task or a project to staff ask them to bear in mind the impact of what they are doing to other departments and the overall organisation and to consult other areas when making decisions

## Lesson 4: Developing Self directed learners

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(<http://www.ashpfoundation.org/transformational/TransformationalChange11021211.html#mentalmodels>)

A self directed learner is one which takes responsibility for their own learning.

Giving the learners the confidence to identify opportunities for learning and constructing their own knowledge required to learn a new skill is key in PBL. Learners must be encouraged to search for their own knowledge and learning material. Trainers must organize experiences that allow learners to develop their own knowledge and understanding (Kerka 1997).

As mentioned previously individuals often do this on a daily basis in their personal lives but feel that in a learning or a business context for which other people are responsible that they do not have the expertise or authority to construct or develop new knowledge.

Guiding learners to do this by providing them with the skills and expertise to enable them to search for and apply the relevant knowledge is key. Some people are naturally self motivated and directed and others are not and need to develop confidence in order to become self directed.

It is important to assess first what stage the learner is at (Grow 1991)

1. Dependant - these are learners are totally resistant to being in any way independent learners and wish to stick to routine definite tasks.
2. Moderately self directed – these are interested in becoming independent but need to be motivated to take more responsibility
3. Learners of intermediate self direction – these are prepared to explore ideas however still need some guidance. Their confidence needs to be built a little more. The need guidance about their learning approaches and if these are successful
4. Learners of high self direction – these learners are completely self directed and are capable of setting their own goals. They have a high level of autonomy. They can manage projects and time, self evaluate their work and use critical information gathering and evaluation techniques to develop the required knowledge for the learning exercise.

#### **For stage 1 learners:**

**Task:** Firstly to develop a self directed learner that is capable of constructing their own knowledge you must start to delegate small definite tasks can build their confidence.

**Support:** Have exact deadlines and be clear about what you expect from them (Grow 1991)

For example, I am looking for information on applying for quality standards, would you mind having a look on the ISO website and see what the application process is? What material needs to be submitted, who it needs to be submitted to, how it needs to be submitted and the deadlines.

#### **For stage 2 learners**

**Task:** the trainer can start to delegate larger less definite tasks. The task can be more loosely structured and less definite than in stage 1.

**Support:** You will need to 'sell' the importance of the task to the learner to motivate them. It is important to praise them throughout the execution of the task and after completion.

e.g. We are thinking about applying for ISO certification in the organisation. It is a really important project. We have had many potential customers asking us if we have ISO certification and some are

reluctant to do business with us because of this. If we are successful we can attract new customers and expand the company.

I need you to look into what are the main criteria we need to satisfy for ISO certification. You might want to speak to the ISO evaluator their details are on the website and also our supplier Joe Bloggs underwent this process recently so you might be able to speak to them

### **For Stage 3 learners**

**Task:** It is possible to use more abstract tasks for knowledge construction opportunities.

**Support:** Stage 3 learners should be more focused on their learning approaches and if they are successful or not. The learner and the trainer collaborate they will meet to discuss what the learner will need to focus on in the task and agree intermediate goals. The learner will then deliver these intermediate goals for further feedback and guidance. The trainer will ask the learner to explain how they constructed this information, was the approach they used successful or not and why and how they would go about it again. This allows the learner to reflect on their learning strategies.

e.g. Could you put a proposal together detailing the measures we need to implement in the organisation for ISO certification. What do you think we will need to focus on? Come back with a draft in a week and we will discuss and revise.

On return with a draft the learner is asked questions such as where did you obtain this information from, why is it important, how they gathered it and how they would apply it

### **For Stage 4 learners**

**Task:** it is important that the trainer allows autonomy and independence. They allocate the learner a task that is challenging and provides opportunities for the learner to thrive.

**Support:** Here the trainer holds regular meetings to provide the learner with the opportunity to discuss their learning and collaborate with others. Learners should be encouraged to collaborate, think in the long term. The trainer can challenge or probe the learner by questioning and allowing them to self evaluate mental models.

e.g. Could you develop a project with your peers to achieve ISO accreditation. We will meet weekly to discuss your progress or any issues you have

#### **Task**

- Identify strategies for dealing with each of these learners in your department. Identify
- The task you would allocate them
  - How you would support them

## **Lesson 5: Collaborative learning and opportunities for reflection**

To encourage a holistic view of the organisation and to build trust collaborative learning is required. Learning is a social process and many learning theorists have emphasised this. Without interaction with a mentor, peer or tutor our learning is limited. A learner might read a history book and learn a

sequence of events such as that which occurred during the second world war however by speaking to survivors and people who experienced life during the war they will get an insight into everyday life and how people were impacted.

There is more than one perspective on a situation. For example, you might have a particular way of doing your job that you think is efficient. However, you might go to your colleague to speak to them about a work issue and notice they have a different way of doing things. You ask them why they do it in this way and learn that it saves more time. You decide to adopt this way of doing the process.

Collaborative learning also allows a systems thinking approach in the organisation. To facilitate collaborative learning rather than assigning a task to one person assign it to a couple of people and ask them to work together where appropriate.

Problem based learning is collaborative by nature and will require several individuals to work together during the process.

**Supplementary Video Resource**  
<https://youtu.be/-pbzp1iG9mI>

### ***Opportunities for reflection and corrective action***

In order for continuous learning to occur it is important that the learner reflects on what they have learned and if it was effective.

Using the previous example if you asked the learner to have a look at how to apply for ISO certification once they give you this information you ask them to reflect on their learning.

- 1) Did you find it difficult to find the information?
- 2) What approaches did you use to search for the information?
- 3) What was the content like, was it easy to understand why?
- 4) If I gave you another similar task to do would you do it any differently?
- 5) How would you go about putting the application together or looking for advice about how to put an application together if we were to look for accreditation.

This is similar to encouraging people to articulate their mental models and challenge them (outlined in lesson 2).

Further reading resources

[https://www.heacademy.ac.uk/sites/default/files/reflection\\_literature\\_review.pdf](https://www.heacademy.ac.uk/sites/default/files/reflection_literature_review.pdf)

<http://www.oecd.org/edu/imhe/43977669.pdf>

<http://www.hawaii.edu/intlrel/pols382/Reflective%20Thinking%20-%20UH/reflection.html>

## **Lesson 6: Critically evaluating your organisation**

We learned the key characteristics for an effective learning culture to enable PBL. It is important to apply these criteria to your own situation. We saw a learning culture:

- Requires trust, communication and support
- Needs individuals to articulate their mental models and critically evaluate them

- Encourages people to look at the impact of their work on other areas of the business I.e. systems think
- Needs to focus on developing self directed learners that construct their own knowledge
- Collaborative learning and creating opportunities for reflection and corrective action should be prevalent.

Based on this it is important to practice what you have learned and critically evaluate your learning culture and identify how it can be improved. To do this we can ask questions about the organisation in the context of the characteristics discussed throughout this unit.

#### Trust

1. Do people feel they openly discuss mistakes in order to learn from them?
2. Do people view problems in their work as an opportunity to learn or a threat?
3. Do people treat each other with respect?
4. Do people spend time getting to know each other?
5. Do teams/groups treat members as equals, regardless of rank, culture, or other differences?

#### Mental models/reflection

6. Are people encouraged to ask “why” regardless of rank?
7. Does the organization encourage people to think from a global perspective?

#### Communication

8. Do people give open and honest feedback to each other?
9. Do people listen to others’ views before speaking?
10. Whenever people state their view, they also ask what others think?
11. Does the organization encourage everyone to bring the customers’ views into the decision making process?
12. Does the organization use two-way communication on a regular basis?

#### Support/collaboration

13. Do people help each other?
14. Are people encouraged and rewarded to work in teams/groups?
15. Does the organization consider the impact of decisions on employee morale?
16. Does the organization recognize people for taking initiative?
17. Does the organization give people control over the resources they need to accomplish their work?
18. Does the organization support employees who take calculated risks?

## Lesson 7: Assignment

Conduct a critical evaluation of the learning culture of your organisation. Interview/survey 3 people. They can be people in different job roles or people at different levels in the organisation. You can adapt the question set above to your company if you wish, or you can develop your own.

Report your findings including how you gathered the data (questionnaires/interviews), why you gathered the data in this way, what questions you used and why

From this develop a learning culture strategy on the measures you will use to foster a learning culture in your organisation and detail why these measures are important in relation to the research you conducted. Outline how they will be implemented and why they will be implemented in this way.