Learning Spaces

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Introduction

Learning Spaces

Learning is the central activity within schools and classrooms. However, with the rapid growth in technology and the changes in the way we learn, principals and educators are forced to adapt to these new changes by changing their practice. For instance, according to Oblinger (2006), today’s students have expectations, attitudes and constrains that differ from students 10 years ago. This leads to the question, ‘as educators, how can we change our practice to enhance and encourage learning?’ According to Oblinger (2006) learning spaces play an important role in student learning. Learning spaces are environments where students are encouraged and challenged to create their own experiences and learn from their peers. Whether the space is physical or virtual, these spaces can have an impact on our learning. Additionally, Oblinger (2006) highlights that learning spaces often reflect the people and the learning approach at the times, hence learning spaces designed 10 years ago are not likely to cater for the way students learn in current times. With that being said, spaces are agents for change (Oblinger, 2006). That is, changed spaces will change practice. Therefore, it is important for principals and educators to redevelop these spaces in order to adapt to the way students learn in the 21st century.

This guide focuses on the design of 6 key learning spaces, their strengths and challenges, learner expectations, and the principles that facilitate learning. It aims to guide educators to produce, adapt and redevelop learning spaces by outlining the components of each of the following key learning spaces:

- E-Space
- Personal
- Group Collaborative, Cooperate
- Classroom and School
- Beyond the Classroom
- Liminal

These new spaces aim to challenge both teachers and students and enhance and encourage learning in the 21st century.
E-Space

E-space is a learning space that is linked to technology and can be used as an educational tool for online learning. Ingvarson, Meiers and Beavis (2005), highlight that online learning consists of a strong community of practice which incorporates peer interaction and teacher interaction. That is, teachers, students and other participants work collaboratively together in an online space to share and gain knowledge. Additionally, Zimmerman, (2000), highlights that online learning relies heavily on students learning behavior and self-efficacy. That is, a student’s motivation and interdependence towards learning. Research indicates that student learning behaviors have important influences on learning (Prior, Mazanov, Meacheam, Heaslip & Hanson, 2016). For example, using social media for teaching purposes is one way to encourage a more informal approach to online learning. For instance, with the increasing use of social media and the familiarity that students have with social media, students are more inclined to participate in such learning, thus enhancing their self-efficacy towards online learning. Lieberman and Mace (2010) found that more teachers are using forms of online communication to connect with their students whether it be informal ways of communication such as email, blogs and other technologies or formal ways of communication such as Wikispace, GoogleDrive or Learning management systems. Ultimately, Kirtman (2009) highlights that many studies indicate that there is a need for students to take a different approach to their learning journey. Hence, the use of these online learning spaces, allow for easy and convenient access to new and improved learning opportunities for both students and teachers.
Strengths and challenges in the Context of Teachers

Strengths:

- Allows teachers to enhance and develop their own professional learning by collaborating with students and be actively involved in the learning process. *(Lieberman and Mace, 2010)*.
- E-learning is effective in that resources and information can be shared for free online and is easily accessible to all students. This saves teachers time and money on printing or buying resources for every student in the class *(Kirtman, 2009)*.

Challenges:

- Teachers may not have sufficient knowledge of software or online tools.
- Making clarifications, explanations and interpretations online can be difficult in comparison to traditional face to face instruction *(Kirtman, 2009)*.

Strengths and challenges in the Context of Students

Strengths:

- Promotes self-efficacy (peer engagement, convener interaction, LMS interaction) and self-motivation *(Zimmerman, 2000)*.
- Teaches life-long skills such as building ideas, learning solutions, creating, sharing and working collaboratively in local and global environments *(Kirtman, 2009)*.

Challenges:

- Lack of knowledge on use of software or online tools.
- Students can become easily distracted from the task at hand when learning online *(Kirtman, 2009)*.
Considerations when Redeveloping/Developing the Space

- PD for staff in use of software.
  - Google Educators: [https://edutrainingcenter.withgoogle.com/](https://edutrainingcenter.withgoogle.com/)

- Use Social media such as Twitter to survey educators about effective and easy software to use in the classroom (Visser, Evering and Barrett, 2014).

- **Teaching Resource**: Learning and Teaching supports students and teachers to manage and extend learning through ICT for improved learning outcomes. (E.g. creating interactive lessons, classroom ideas)
  [https://icttoolkit.wikispaces.com/Learning+and+Teaching](https://icttoolkit.wikispaces.com/Learning+and+Teaching)

- **eLearning Principal Program**: A program designed to support the work of school leadership teams in creating the conditions for success for ICT learning by suggesting strategies for digital education. Currently used by Queensland State Schools.

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Fig 1. Effective e-learning incorporates digital pedagogies, digital content and e-learning spaces. If one component is missing, the approach is unbalanced and less effective (Department of Education and Training QLD, 2008)
Chapter 2

Personal Learning Space

A Personal Learning Space is a flexible structure which can be individualized to the needs and interests of the learner, therefore, each personal learning space can differ depending on the learners needs. A personal learning space consists of a range of connections with both digital and non-digital resources and informal and formal learning. It is about melding together your own personal learning space with all these different resources. Additionally, Schaffert & Hilzensauer (2008), put forth that although there is no specific definition of a personal learning space, one common trait amongst many definitions is that personal learning environments, give the learners control over their own learning process. In support of this notion, Prior, Mazanov, Meacheam, Heaslip & Hanson (2016), highlight that online personal learning environments promote self-efficacy, self-direction and reflection. These are all forms of self-directed learning in which learners have the primary responsibility of planning, carrying out and evaluating their own learning experiences. Self-directed learning is described by Knowles (1975), as individuals taking initiative towards their own learning, identifying resources for learning and choosing and implementing appropriate learning strategies. Ultimately, Knowles (1975), puts forth that personal learning spaces allow students to become proactive and motivated learners.
Strengths and Challenges in the Context of Teachers

Strengths:

- Allows teachers to encourage and motivate students in their learning by giving them responsibility and a sense of control over their learning (Schaffert & Hilzensauer, 2008)

Challenges:

- Keeping students balanced and on task by allowing them to use the web’s full potential and keeping them safe and on task (Knowles, 1975).

Strengths and Challenges in the Context of Students

Strengths:

- Assists students in organizing themselves and their learning (Knowles, 1975).
- Promotes student initiative by allowing students to be in control of their own learning
- Allows student to develop self-efficacy and self-direction
- Enhances unique learning styles

Challenges:

- Taking responsibility of own learning can be overwhelming for some students
- Everyone is different: PLS differ depending on individual
- Student without any skills of self-directed inquiry are likely to feel overwhelmed (Knowles, 1975).
Considerations when Redeveloping/Developing the Space:

- Survey staff and students about what they understand their personal space to be. For instance, conduct a survey on students on how they best learn in the classroom in relation to their surrounding environment. Teachers can use this information as a resource in redeveloping the space in the classroom.
- Use online resources to create personal learning spaces
    Symbaloo is a visual resource management tool that allows users to bookmark web pages, videos and other resources and digital tools onto one page. Students are able to bookmark information, keep track of sources and save links. This is an effective way for students to organize themselves and keep track of their learning.
    Additionally, SymbalooEDU provides programs for teachers to learn how to incorporate personal learning environments and technology into their classrooms.
- Get students to develop a personal learning plan (Fig.2)

![Personal Learning Plan Diagram](image)

**Fig 2. Developing a personal learning plan assists students in gaining skills of self-directed inquiry as it helps students to plan their personal and learning goals and reflect on their personal development.**
Chapter 3

Group, Collaborative and Cooperative

Wang (2009), describes the collaborative learning space as a space in which a group or community of people either in person or in an online environment, collaboratively work on a task together. Collaborative learning spaces promote social learning and maximum engagement.

Slavin (2010), describes the co-operative learning space as a space which is much more structured where each member depends on each other to accomplish a shared goal or task. Although there is some form of group work, each member is responsible for their own input. One of the main goals of co-operative learning is to learn initiative and self-reliance.

A group learning space is less structured and does not depend on each individual input. Members work together as a group to collaborate and may discuss ideas or work on a task together.

Although there are some distinctions between group, collaborative and cooperative learning, all forms of learning encompass many common traits and skills such as interpersonal and collaborative skills and teamwork. Additionally, according to Slavin (2010), all three types of learning combined, present effective educational outcomes as it promotes many life-long skills such as social skills, learning to take initiative, learning self-reliance and working co-operatively together in partners or groups.
Strengths and Challenges in the Context of Teachers

**Strengths:**

- Provides opportunities for mixed ability grouping/teaching \((\text{Slavin, 2010})\)
- Allows teachers to encourage and motivate students in their learning by giving them responsibility and a sense of control over their learning \((\text{Schaffert & Hilzensauar, 2008})\)

**Challenges:**

- Inaccurate individual assessments during group work \((\text{Bower & Richard, 2006})\)
- Monitoring all group discussions to ensure members are discussing task at hand \((\text{Wang, 2009})\)
- Classroom management challenges: e.g. noise levels during group discussions \((\text{Wang, 2009})\)

Strengths and Challenges in the Context of Students

**Strengths:**

- Benefits all types of learning and all abilities of learners \((\text{Slavin, 2010})\)
- Helps increase self-esteem as student’s views and ideas are accepted by peers \((\text{Bower & Richard, 2006})\)
- Group work assists students in gaining communication skills, leadership skills \((\text{Slavin, 2010})\)

**Challenges:**

- Learning is dependent on the participation of all members \((\text{Wang, 2009})\)
- Individual efforts may not be recognized \((\text{Bower & Richard, 2006})\)
- Students with low confidence may not want to participate in large groups
Considerations when Redeveloping/Developing the Space

Fig. 3 Traditional Setting

Fig. 3 Represents a traditional classroom setting. The seats are placed in the same positions all facing one direction of the room. The room is much more cluttered with little room to move around. Fig. 4 Represents a much more vibrant, aesthetically pleasing classroom. The mixture of vibrant colors, combination of chairs and soft furnishing provides an inviting environment for students to learn. This type of learning environment allows students to move around freely, collaborate and work with their peers in a comfortable group setting.

From Traditional to Collaborative: Teacher Resources for redesigning the Classroom

The following websites provide great ideas to consider when designing a collaborative learning space.

- Cambridge Primary School
  

- New Learning, New Spaces
  

- Classroom for Teachers: Redesign your classroom using Classroom Architect
  
  [http://classroom.4teachers.org/](http://classroom.4teachers.org/)
The Classroom and School: 

Traditional V. Open Learning Spaces

The classroom is a central spot in which learning occurs. However, the question is, ‘does space and design effect student learning and determine the educational outcomes of our students?’ Smith (2006) highlights that the nature of education has become more open, interactive and experiential as opposed to a traditional classroom setting that had an institutional feel and a standard classroom layout. Students now have the opportunity to learn in multiple ways and Smith (2006) argues that the spaces in which they learn should be equally varied. For instance, the school classroom is an example of a space that should be both flexible and inspiring and where learning is engaging, instructive and comfortable. In support of this idea, Pasalar (2003) highlights that a growing number of researchers agree that developing better designed classrooms generate more stimulating environments, for learning and social interaction for both teachers and students. Additionally, Pasalar (2003) puts forth the notion that students in stimulating school environments, tend to achieve better in class activities and gain skills. This brings forth the question, ‘how can we as educators create open learning spaces that enhance student learning in the classroom?’ Read (2010) highlights many significant thoughts, ideas and considerations when creating effective learning spaces. For instance, the elements of shapes, lines and colors used in a classroom create the overall aesthetic effect of the space. Other elements to consider is the physical layout of the classroom such as the placement of chairs and tables. Ultimately, these elements of an open classroom provide students with a stimulating learning environment as opposed to a traditional classroom setting.
Strengths and Challenges in the Context of Teachers

Strengths:

- Teachers are able to team teach to provide teaching and learning programs that support improved student outcomes (Woolner, 2010)
- Supports mixed ability teaching (Biddick, 2014)
- Creating a stimulating open learning space encourages and motivates student participation and learning (Biddick, 2014)

Challenges:

- With a large open space, teaching spaces can become difficult to manage as students may push boundaries (Biddick, 2014)
- Openness can disrupt teaching conventions (Woolner, 2010)

Strengths and Challenges in the Context of Students

Strengths:

- Students have large space to move around and work collaboratively with peers or independently (Smith, 2006)
- Increases social interactions/stimulating environment for students (Pasalar, 2003)
- Open space provides students opportunities to work in comfortable learning environments (Smith, 2006)

Challenges:

- Noise levels can be problematic as students can be easily distracted (Biddick, 2014)
- Communication between teacher and students can be problematic due to noise levels
Considerations when Redeveloping/Developing the Space

Managing open learning spaces (Biddick, 2014):

- Ensure that the floor plan for the classroom reflects the vision for learning and is able to support a range of pedagogical activities
- Room is visually stimulating and inviting
- Whole school vision and teaching philosophy are determined and adhered to by all staff
- Strategies used for student management/noise control
- Having visual of all students in the classroom
- Voice projection: can all students hear you?
- Are there expectations that all teachers will team teach?
- If there are bi-fold or sliding doors, are they to stay open or can they be closed?
- How is Information and Communication Technology to be incorporated?
- Are students grouped across classes?
- Is there enough room and space for students to safely move from one activity to another?

Traditional to Open Learning Spaces: Teacher Resources for redesigning the classroom

- Denver School of Science and Technology: Provides a checklist of ways that school design can support learning gathered from the Design for Learning Forum held by the American Architectural Foundation and Target.
  - Video: https://www.youtube.com/watch?v=NLvoNjrjryg

- Classroom for Teachers: Create your own classroom using Classroom Architect
  http://classroom.4teachers.org/
Although learning is central part of classroom activity, learning can also occur beyond the classroom. Research indicates that the learning process is enhanced when information is presented in a different context other than the traditional classroom. For instance, Johnson (2009) and Lorenza (2009), highlight that incursions and excursions are a great way in improving student learning. These experiences not only provide students with experiences of social and emotional learning but learning in general. With this being said, Bentley & Gardner (2012) also highlight some of the challenges being faced in today’s society. For instance, Bentley et al. (2012) that without experiences and knowledge of learning beyond the classroom, children are left un prepared for the outside world. That is, students who have excellent knowledge on a subject they learnt within the classroom, cannot always apply this knowledge in unfamiliar surroundings. Therefore, it is important for students to be exposed to these unfamiliar surroundings beyond classroom walls in order to prepare them for future experiences.
Strengths and Challenges in the Context of Teachers

Strengths:

- Learning processes are enhanced when presented in context as opposed to traditional classroom settings (Johnson, 2009)
- Teachers learn new strategies for addressing social and emotional learning (Johnson, 2009)
- Teachers can provide students with real life stimulus to better recognizing and understanding the theories and concepts explored in the classroom (Lorenza, 2009)

Challenges:

- Budget constraints. E.g. transportation, facilities used, equipment
- Making a school excursion a learning experience and not just a day out (Lorenz, 2009)
- Safety of the students (consideration of asthmatic students, students with disabilities)
- Behavior management: managing unruly behavior outside of the classroom

Strengths and Challenges in the Context of Students

Strengths:

- Support students emotional and social learning. E.g. able to manage emotions, behave ethically and responsibly and make good decisions (Johnson, 2009)
- Students are exposed to stimulating experiences that allow them to view their world in new and positive ways (Johnson, 2009)
- Learning is enhanced when the environment is dynamic and characterized by new experiences and continuous change (Rogers, 1969)

Challenges:

- Students may become distracted or not understand the educational purpose of the excursion/incursion
Considerations when Redeveloping/Developing the Space

| Considerations: Excursions  
| (Lorenza, 2009) | Considerations: Incursions  
| (Lorenza, 2009) |
|---|---|
| - What is the curricular connection of this excursion and what can I do to prepare my students to gain from this experience? |
| - What educational benefits or opportunities exist from this excursion? |
| - What are the operational considerations of this excursion: appropriate clothing, departure and arrival times, lunch and snacks, student’s medical conditions, student teacher ratios, emergency procedures etc. |
| - Teacher roles: who is responsible for what and whom on the day |
| - What do teachers hope their students gain in terms of curriculum from this incursion. How can teachers prepare their students for this? |
| - What educational benefits or opportunities might exist beyond curriculum? |
| - What are the space and seating or standing requirements and what are any other resource requirements so that teachers can be well prepared? |

Teacher Resources: Planning Excursions/Incursions

- Victoria, Education and Training: School Policy and Advisory Guide (Excursion activities)  

- The Australian Directory for school excursions: Provides excellent ideas and resources for planning excursions or incursions.  

- SchoolExcursions: Online directory for schools/teachers. Excellent resource which provides ideas for educational excursions/incursions  
Chapter 6

The Liminal

Developing effective learning spaces is not always about the physical attributes or what we can see in front of our eyes. For instance, the Liminal is considered an intangible space and researchers generally use analogies of doorways, gateways and landscapes to describe it. It is frequently referred to as a transformational space, an uncomfortable space and a bridge between learning moments. For instance, Meyer & Land (2006), characterized liminality as a transformative state that engages our existing beliefs and challenges them to the point of uncertainty in which we are left in a space of not knowing. This is considered as the bridge between two learning moments in which Schwartzman (2010), describes as the threshold theory. With this in mind, this leads us to question, ‘what can happen when we as educators and our students experience the liminal in the classroom and how can this experience enhance student learning?’.

Researchers such as Kerdeman (2003), emphasize the creative potential of the liminal space. That is, the idea of students staying in a liminal space allows students to extend and stretch their thinking. Their ideas and beliefs are not set in stone. Instead their ideas and beliefs stay fluid, emergent, provisional and exploratory, leaving them with lots of unexplored possibilities. These kind of transformations are non-linear as the students are not expected to understand simple isolated concepts but are rather given more abstract information. This way of thinking allows students to understand that in whatever liminal space they may be in, learning is ongoing and when their views and beliefs are challenged, they are exposed to new and unfamiliar ways of thinking.
Strengths and Challenges in the Context of Teachers

Strengths:

- Open to analysis. Leaves room for new ways of thinking for teachers
- Allows teacher to explore a wide range of topics
- Encourages self-understanding

Challenges:

- Catering to each student. Students may learn differently thus understand differently
- Students may not understand concepts the teacher is trying to portray

-Kerdeman, 2003

Strengths and Challenges in the Context of Students

Strengths

- Students develop a growth mindset as opposed to a fixed mindset
- Exposed to new and unfamiliar ways of thinking, new perspectives and ideas. Students develop self-understanding
- Students are encouraged to describe discuss and explore concepts, in turn leading to a better understanding of that concept.

Challenges:

- Some students may find it overwhelming or confronting with the idea of not knowing
- Create low self-esteem for students
- Can lead to confusion as students can misinterpret information

-Kerdeman, 2003
Considerations when Redeveloping/Developing the Space

*Creating a liminal space*

- Encourage students to think beyond what they already know
- Explore the unknown
- Formulate discussions and explore new ideas by formulating questions
- Guide students thinking
- Explore change

*The liminal space can be a difficult concept to grasp. The following video provides a different perspective on the Liminal space, described in a more personal context:*

https://www.youtube.com/watch?v=arsnnuyjL5g

*Fig. 6 The Liminal Space*

Fig. 6 represents what we understand as the Liminal space. The bridge between learning moments. The unknown. Ideas and beliefs stay fluid, emergent, provisional and exploratory, leaving us with lots of unexplored possibilities.
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