Pedagogies that support Flexible Learning Environments

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Purpose and Rational:

A large number of New Zealand schools have embarked on establishing what is known as Modern Learning Environments (MLE). The Ministry of Education defines a MLE as:

"A modern learning environment may be understood to be the complete physical, social and pedagogical context n which learning is intended to occur."

A Modern learning Environment can include a number of different types of spaces (classrooms, breakout spaces, laboratories, performance spaces etc) and the environment is one that is capable of evolving and adapting as educational practices evolve and change.

According to Osborne (2013) a MLE can facilitate traditional pedagogies eg. direct instruction, but typical offer students and teachers much more:

- *Flexibility*: the ability to combine or split groups as needed

- *Openness:* the ability to observe and learn from others because spaces have fewer walls and more shared spaces

- *Access to resources*: a variety of resources (including different spaces, technology, books) are available to teachers and students.

I find the name MLE a very unfortunate choice for a number of reasons. Firstly: What is a Modern environment? Will this environment not be modern anymore after a certain period of time? Secondly: I believe that far too much emphasis is also placed on the Environment aspect and that the Learning aspect can easily be overlooked. For some schools and teachers it has somehow evolved into a focus on modern buildings, modern furniture, but not necessarily changed pedagogy practices.

I believe that this process should primarily be all about the learning and that a term like Flexible Learning Environment is more appropriate. Flexible refers both to the changing nature of the learning and the adaptable nature of the physical environment we work in. It implies that the age of the building is not important, what is important is how it is set up and used.

Flexible Leaning Environments are connected, flexible spaces that allow teachers to collaboratively tailor learning for small or large groups, with an ongoing focus on Teaching as Inquiry. A FLE is one that is capable of evolving and adapting as educational practices evolve and change – thus remaining current and future focused.

Methodology:

Gathering information and insights for this report was gathered in mainly 3 ways:

- Doing a Literature Review with a focus on the nature of learning in the 21st century, current teaching and learning and the relationship between physical space and school environments;
- Visiting and observing practices in a number of schools both in New Zealand and Australia
- Discussions with a number of educators.

Executive Summary:

- FLE is more about modern learning pedagogy than modern learning spaces

- Educational purpose is a critical factor in pedagogical choice

- Key features of a FLE are: Flexibility, Openness and Access to resources

- A change in mindset is very important

- A FLE is about Child Centered learning environment that engages students and teachers more

- The teachers role is that of coach, facilitator and resource

- Pedagogies chosen will mostly be supporting a constructivist approach

- A FLE can play an important role to develop the Key Competencies

- Collaboration is critical in an effective FLE

- FLEs do not only impact on students, but also on teachers

Findings:

<u>What is pedagogy?</u>

Pedagogy is the art or science of teaching and educational methods. Pedagogy refers specifically to the function of a teacher (teaching), and the teaching methods/theories being employed.

Pedagogy thus sits at the heart of the teaching profession and plays a critical part in core role of a school.

There are 4 major teaching and learning theories: Behaviorism, Constructivism, Sociolinguistics and Cognitive/Information Processing. These again can be organized under the following two orientations:

Teacher Centered:
- Behaviorism: This theory focuses on observable changes in behavior and sees the teacher's role as providing information and supervising learning activities. It uses incentives and reward to motivates learners.

Student Centered:
- Constructivism: Constructivism sees learning as an active process of constructing knowledge. It recognizes the importance of the learner's background knowledge and draws on the learner's innate curiosity. It focuses on ways to engage learners so they can be successful.
- Sociolinguistics: This theory places the emphasis on the importance of language and the social interaction of learning. It supports the idea that students learn best through authentic activities and defines the teacher's role as that of scaffolding the learning. It challenges learners to confront injustices and inequities in society.
- Cognitive / Information Processing: This theory compares the mind to a computer and views reading and writing as meaning-making processes.

<u>What factors impacts on the pedagogies used?</u>

I have identified 3 major aspects that have an impact on the selection and use of educational pedagogies, these are:

- Educational Purpose (goals and outcomes)
- Teaching Beliefs (values and philosophy) and preferences
- Learning spaces available

1) Educational Purpose:

The vast majority of teachers try to make a positive difference for students and their learning, but the issue is what type of difference you are aiming to achieve. It is important that teachers and schools are able to articulate their purpose and what priorities drive their practice. The learning goals and outcomes are a key focus area in every learning space and as such will have a big impact on the pedagogy employed to achieve the goals and outcomes.

In most teaching spaces learning goals can be divided into 2 broad groupings:

1) Basic Skills and knowledge, and
2) Skills for 21st Century learning.

When the teacher's main focus is on students gaining basic skills and knowledge, we normally see them using pedagogies that focus on direct instruction (lectures and small group instruction) and follow up activities. This approach is very curriculum driven and the teacher is the main provider of knowledge.

In learning situations where teachers also focus on the skills for 21st Century learning, we see a much bigger variety of teaching and learning methods being used. The term "21st-century skills" is generally used to refer to certain core competencies such as collaboration, digital literacy, critical thinking, and problem-solving that advocates believe schools need to teach to help students thrive in today's world.

These teaching and learning methods might include:

- direct instruction
- small group works
- large group work
- investigations
- inquiries
- self and peer assessment
- "hands-on" work
- independent work.

In this approach there is a big focus on student needs and student engagement.

Having a 21st Century learning focus fits best with an FLE as it accommodates a mindset of change to more meaningful pedagogies that engage pupils and teachers more deeply in learning.. Developing the Key Competencies (NZC) is the major driver. FLE pedagogies are normally driven by the following purpose:

- to foster independent learners
- for students be active decision makers, learning through collaboration
- students/teachers connecting with others
- students making connections across learning areas.

The role of the teacher changes to one of a facilitator and resource.

2) Teaching Beliefs and Preferences:

Teacher Centered:
We see this approach to learning in classrooms where teachers view themselves as the main authority figure. Students are viewed as "empty vessels" whose primary role is to passively receive information with a goal of testing and assessment. The predominant methods used here will be lectures and direct instruction.

The core primary role of teachers in this approach is to pass knowledge and information onto their students. Student learning is measured through objectively scored tests and assessments. Direct instruction is the dominant teaching method in these classrooms as the teacher is seen as the sole/main supplier of knowledge. Direct instruction is often supported with individual or group work – all very structured and focused on the completion of a specific task. This method has shown to be effective in teaching the basics in a number of curriculum areas.

Student Centered:
In a "Student Centered" classroom I observed teachers who are an authority figure, but teachers and students play an equally active role in the learning process. A strong Constructivist Approach will be evident. The teacher's key role is to coach and facilitate student learning and design of the learning programme. Student learning is measured through both formal and informal forms of assessment, including group projects, portfolios, and class participation. Teaching and assessment are connected; student learning is continuously measured using formative and summative assessments.

In these classrooms teachers use a certain level of direct instruction, but the learning process is primarily inquiry-based and cooperative learning. Inquiry-based learning is a teaching method that focuses on student investigation and hands-on learning. In this method, the teacher's primary role is that of a facilitator, providing guidance and support for students through the learning process. Cooperative Learning is a method of teaching that emphasizes group work and a strong sense of community. This model fosters students' academic and social growth and includes teaching techniques such as "Think-Pair-Share" and reciprocal teaching.

A teacher's beliefs and school culture has a major impact on the pedagogies used in a learning space. In schools and spaces where a specific teacher's beliefs and the school culture is not aligned, deeper investigation shows that the teacher will revert back to their own preferences whenever possible.

3) Learning spaces available:

I don't believe that learning spaces as such have a similar level of impact as Learning Outcomes and Teaching Beliefs, yet the impact on a fair number of teachers cannot be ignored. From my observations and discussions I think the impact is mostly as follows:

- The availability of a specific space will encourage teachers to try methods they might not have in the past;
- Specific spaces can be very encouraging as they make the use of certain types of learning a lot easier;
- The lack of specific spaces can cause a lot of frustration and act as a deterrent if it becomes to hard to use certain methods, eg. Lack for flexibility, lack of areas for small/big groups, lack of access and lack of technology, and
- A number of general variables can also have a detrimental impact e.g. lighting, acoustics and ventilation.

It was very concerning to see the number of teachers who view the availability/lack of certain spaces as a major barrier.

We know that biggest difference to student achievement is made by the quality of feedback teachers give their students (Hattie). Traditionally people thought a good teacher is the one who could explain things best, but the key is for teachers to provide opportunities for students to think, and understand how they learn themselves.

A FLE is thus not about the space as such, but about a change in mindset of students and teachers, and a change to more modern learning pedagogies that engage and develop students more.

Implications:

I believe that the success of a Flexible Learning environment is built on strong pedagogical beliefs. The main purpose of a FLE is to support and facilitate active and collaborative learning. The predominant pedagogy should thus be a socio-constructivist one.

Using this pedagogy we will see a student-centered approach with the teacher as the designer and facilitator of learning. Students will actively "experience" their learning, rather than being passive learners.

An FLE also supports collaborative learning. Groups of students are better able to work together on challenges, problem solving and inquiries, and can also share learning experiences. Students working n various sized groups and teams also learn from each other, supporting and receiving support and thus developing a learning community.

A range of strategies can thus be supported, including delivering, applying, crating, communicating and decision-making. FLEs also provide an excellent environment for the natural development of core skills like self-management, student efficacy, collaboration, responsibility and communication.

With the right pedagogical base, a FLE learning space will be able to motivate learners and promote learning as an activity, support collaborative as well as formal practice, provide personalised learning and an inclusive environment, and be flexible to cater for changing needs.

Flexible Learning Environments also have an impact on teachers. Open and flexible spaces create more collaborative practice. Having ongoing access to the practice of your colleagues to model and to be modeled to, supports the development of effective teaching practice far more than teaching in an isolated space.

FLEs can also support teaching as inquiry better than traditional classrooms. Working in an environment where inquiries are shared, actions designed collaboratively and reflections based on both self and peer observations, leads to a deeper, continuously improvement.

Acknowledgements:

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