



Element 10

## **Diversifying Methodologies**

The Learnlife model captures a diverse range of learning methodologies. Learning guides select from a toolbox of methodologies that best targets learner needs. The current list of 25 methodologies continues to grow as new ones are created or discovered.



## Diversifying Methodologies

Education has traditionally favoured direct, teacher-led instruction as the dominant learning methodology above all others. This is regrettable because it positions learners as passive receptors of content and knowledge which restricts broad learning opportunities.

If one of the goals for a new learning paradigm is to promote self-determined, lifelong learning, educators must select from a broad range of methodologies to encourage it. Using diverse learning methodologies exposes learners to varied experiences that ultimately increases agency and supports the skills to encourage self-determined, lifelong learning.

Research demonstrates that learners are not limited to specific, formal suited learning ‘styles’ which was commonly assumed. Our capacity to learn can be captured using a broad spectrum of methods, i.e. visual, auditory, reading, writing and kinaesthetic. While a student may have a preference for learning in a particular format, presentation of the material in different ways does not impair learning<sup>1</sup>. This means a learning community must ensure its students are exposed to as broad a range of learning experiences as possible.

By broadening methodologies, educators facilitate engaging, purpose-inspired learning experiences and provide the flexibility learners require to develop their core skills and competencies. The methodologies can be designed to be agile, active, relational, collaborative, transdisciplinary, evaluative and learner-led; all experiences that support success in the 21st century and preparation for a range of eclectic career pathways.

Growth programmes to develop the capacity to deliver diverse learning methodologies will strengthen and support the development of all educators and its community by increasing the personal toolkit of learning methodologies available. A learning community ideally should have the collective professional expertise to empower its students with as broad a range of learning methodologies as possible. The key question to consider is; how enriched with experiences and prepared do you want students to be once they leave the safety of the learning community and enter the workforce?

Then	Now
<ul style="list-style-type: none"> <li>• Learning was teacher-led, usually adopting a ‘teacher-at-the-front’ approach.</li> <li>• Curriculum requirements and content heavy lessons dictated the learning delivery and outcome.</li> <li>• Education systems were limited in their awareness of the various types of methods existing in different cultures and contexts.</li> </ul>	<ul style="list-style-type: none"> <li>• Educators facilitate the learning experience and enable learners to fully immerse themselves.</li> <li>• Learning is a challenge where the process of immersion is part of the experience, not just the outcome.</li> <li>• A digital age has opened up the sharing of new learning methodologies, broadening the suite of opportunities.</li> </ul>

<sup>1</sup> Polly R. Husmann & Valerie Dean O’Loughlin, 2018. ‘Another Nail in the Coffin for Learning Styles? Disparities among Undergraduate Anatomy Students’ Study Strategies, Class Performance, and Reported VARK Learning Styles’ in *Anatomical Sciences Education*, 12(1): 6-19.

## Starting Questions

1. How many learning methodologies do you feel are adequately represented in your learning community?
2. What do you feel should be the overarching mission for every learner who is educated within your learning community?
3. What do you or your learning community believe is the best environment or scenario for effective learning at the individual level?
4. How could adopting a broad range of learning methodologies enhance your learning community?
5. If your learning community is government regulated, how could you design learning experiences that took full advantage of the learning methodologies widely available whilst being bound to curriculum content?

## Key Initial Actions

1. Familiarise yourself and your learning team with the 25 methodologies document. Discuss approaches and assess whether your community is using any methods listed and where the room for improvements are.
2. Survey your learners about their preferred methodologies, how they learn best, including the skills and competencies they feel they are developing relevant to each methodology.
3. With your learning team, create a sub-list of methodologies not commonly used and enable experimentation. Encourage a 'fail forward' mindset.
4. Create observation opportunities for educators to experience a particular methodology to develop their learning experience toolkit.

## On-going Actions

1. Track the use of diverse methodologies to capture the breadth of their use.
2. Create and share a bank of learning ideas and examples of methodologies with your learning team to increase capacity, skills and competencies.
3. Ensure broad skills and competencies can be developed within your learning community through the learning methodologies used.
4. Use outside agencies such as businesses, think tanks, governments and educational departments to collaborate with and gather the most current information relating to learning methodologies to relevant job skills.
5. Facilitate continued training and development opportunities for educators by using all the above steps in the process of actioning change.

## Further Reading

[Teaching: Best practices from around the world](#)

[Realizing Human Potential in the Fourth Industrial Revolution](#)

[Overview of Learning Styles](#)

[Teacher Development Trust](#)

[What is Lesson Study?](#)

## Find out More

*How many lessons have you sat through in your life with the same methodology used repeatedly by the instructor/teacher?*

*I remember joking with friends at school that you could mark on the floor in front of the blackboard with an 'X' where Mr French (pseudonym) stood at the start of every lesson, everyday. The sad thing is, I wish I could remember any of the content he 'taught' us. It was entirely textbook learning with a teacher-at-the-front scenario. This went on relentlessly, day after day, regardless of people, their circumstances or any vaguely interesting global topic. How we longed to be liberated to experience or at least use what we were being taught! I suspect a great majority of the population can relate to aspects of this story; if not in whole, at least in part.*

## Key Ideas

1. A key approach to nurturing a strong love of learning is the educator's selection of methodologies.
2. Research highlights that the brain can grow synapses - a process known as synaptogenesis - which is specific to varied learning experiences.
3. Using diverse methodologies exposes learners to varied experiences that ultimately can increase learner agency and support the skills to encourage self-determined learning.
4. A brief synopsis of each learning methodology.

## Questions

- How equipped are the educators in the learning community to deliver a diverse range of learning experiences for its students?
- Are there professional development opportunities specific to growing educator capacity of learning methodologies?
- Does the learning community mission statement emphasise the importance of ongoing development of learning design experiences and methods approaches?
- How aware are the learners in the community of the various learning methodologies available to them?
- Does the learning community appropriately cater to the various learning styles and needs of all its students?

## **1. A key approach to nurturing a strong love of learning is the educator's selection of methodologies.**

If one of the goals of a new learning paradigm is to promote self-determined, lifelong learning, educators must select from the broad range of methodologies available to encourage it. Education must revolutionise its use of common learning practices by drawing from the best methodologies from around the world. This does not mean 'reinventing the wheel', but accessing the information available in a global knowledge economy to examine and assess the best systems and practices available.

By broadening methodologies, educators facilitate engaging, purpose-inspired learning experiences and provide the flexibility learners require to develop their core skills and competencies. Using diverse methodologies prepares learners for a future of agile engagement in a range of eclectic career pathways.

## **2. Research highlights that the brain can grow synapses - a process known as synaptogenesis - which is specific to varied learning experiences.**

New research demonstrates that learners are not limited to specific, formal suited learning 'styles' which was commonly assumed. Our capacity to learn can be captured using a broad spectrum of methods, i.e. visual, auditory, reading, writing and kinaesthetic. While a student may have a preference for learning in a particular format, presentation of the material in different ways does not impair learning<sup>1</sup>.

*'Your brain has a potential for learning that is virtually limitless, which makes every human a potential genius.'*

*Stephen Downes*

## **3. Using diverse methodologies exposes learners to varied experiences that ultimately can increase learner agency and support the skills to encourage self-determined learning.**

Learning methodologies in a new paradigm may be unique in what the outcomes might be, but they contain some key similarities:

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<sup>1</sup> Polly R. Husmann & Valerie Dean O'Loughlin, 2018. 'Another Nail in the Coffin for Learning Styles? Disparities among Undergraduate Anatomy Students' Study Strategies, Class Performance, and Reported VARK Learning Styles' in Anatomical Sciences Education, 12(1): 6-19.

### **Facilitated by educators to be learner-led**

They are facilitated by educators and designed to be learner-led, with support provided through mentorship and coaching. They encourage learner autonomy by cultivating the habitual skills of self-determined learning. Learner-led learning encourages an environment of discovery, innovation, and learning from mistakes by failing-forward. It provides learners with a higher sense of agency and purpose.

### **Agile**

Embedded in the diverse methodologies are opportunities to learn in a realistic environment to enable learners to simulate the core skills of complex problem solving, critical thinking, creativity, collaboration, and digital literacy. These are all crucial components learners must possess to remain flexible when navigating through the demands of future job markets.

### **Promote active learning**

Active learning enables learners to become active participants in the shaping of their own learning development, not simply passive absorbers of knowledge. It increases the ability of learners to communicate their understanding of their skills, competencies and concepts.

### **Highly relational**

New learning methodologies are interactive, engaging and increase interpersonal and intrapersonal skills. Using diverse methodologies enables learners to seek assistance while offering assistance to others. Learning through diverse methodologies in a strong relational community strengthens a learning culture and fosters a sense of belonging.

### **Fosters diversity and inclusivity**

Learning in diverse groups prepares individuals for engagement in a global society. Applying knowledge across cultures develops respect for far-reaching values and human experiences all while capturing diverse learning methodologies across different cultures and traditions.

### **Continued evaluation**

The methodologies encourage and offer a broad and flexible range of evaluative approaches to learning, which includes;

- learning guide-led evaluations through mentorship and coaching;
- peer to peer evaluation;
- outside experts or parental involvement in learning feedback;
- digital evaluations;

- 360 evaluations and;
- continued, habitual, self-evaluative approaches to learning.

Educators collaborate to evaluate learning processes to improve the design and delivery of diverse methodologies and receive feedback from their colleagues and learners on their impact.

### **Multi-skills approach to learning**

Diverse methodologies create a multi-skills approach to learning and encourage learners to explore tasks using wide-ranging, high order skills such as problem solving, critical thinking, teamwork, creativity, collaboration, digital literacy and communication.

## **4. A brief synopsis of each learning methodology.**

The definitions of the 25 learning methodologies below reflects the research undertaken at Learnlife. There are existing variations to the methodologies outlined, for example the naming of a methodology may differ. The important concept is that to promote personal learning, educators must draw from the eclectic range available to them.

The list of diverse methodologies is not definitive and captures as many that have emerged to date or are discussed in contemporary global learning contexts.

### **1. Place-Based Learning**

Learning is captured through participation in projects for school or in a community. It immerses students in local heritage, cultures, landscapes, opportunities and experiences, and uses these as a foundation for learning immersion in any subject area.

### **2. Experience-Based Learning**

Learners are guided on a journey that introduces them to a new cultural and contextual experience which begins with 'place' as the starting point. One key feature is that learners analyze their experience by reflecting, evaluating and reconstructing to draw meaning in light of prior experience.

### **3. Peer-to-Peer, Crowd-Sourced & Social Learning**

This involves the gathering and sharing of knowledge and understanding among peers. In varying social contexts, it enables a platform for learners to access information that they may not be otherwise privy to, which creates more authentic, real-life learning experiences and more equitable learning opportunities.

### **4. Project-Based Learning**

Students gain knowledge and skills by working for an extended period of time to in-

investigate and respond to authentic, engaging and complex questions, problems or challenges. The learning often connects various subject areas using transdisciplinary or interdisciplinary approaches.

### **5. Challenge-Based Learning**

Learning which involves solving real-world challenges. This method is collaborative and requires participants to identify big Ideas, ask relevant questions, discover and solve challenges, gain in-depth subject area knowledge, develop 21st-century skills and share thoughts with the world.

### **6. Play-Based Learning**

Learning development through play activities enabling individual and collaborative opportunities across a variety of subject areas and contexts. Play based learning fosters the fundamental communication skills required to learn effectively.

### **7. Nature-Based Learning**

Enables learners to connect to their natural environment through social and physical experiences. A body of research highlights that children's social, psychological, academic and physical health is positively impacted when they have daily contact with nature.

### **8. Sustainability-Based Learning**

Encourages individuals to design and implement actions to alleviate contemporary ecological issues and create equitable solutions. It leads students to develop an overall capacity to contribute to a more sustainable future of environmental integrity, economic viability and a just society for present and future generations.

### **9. Phenomenon-Based Learning**

Exposure to real-world phenomena provides the starting point for this method of learning. Phenomena are studied broadly, crossing the boundaries between subjects and integrating different themes. Learners build answers to questions or problems posed concerning a phenomenon which interests them.

### **10. Game-Based Learning**

Relates to the use of games to deliver learning. This includes digital and non-digital experiences. Game-based learning empowers students to build essential skills such as problem solving, decision making, communication, collaboration, negotiation, team work, creativity, leadership and critical thinking.

### **11. Service Learning**

Combines learning objectives with community service to provide a pragmatic, progressive learning experience while meeting societal needs. Service learning empowers learners to achieve real objectives for the community and a deeper understanding of civic duty.

## **12. Social Entrepreneurship-Based Learning**

This exposes learners to the cross-disciplinary skills necessary to build effective and efficient business-based solutions to social issues. Social entrepreneurship-based learning prepares students for an ever-changing workforce and equips them with the skills to address contemporary local and global challenges.

## **13. Learning by Tinkering / Making**

Learning in makerspace, hackerspace, and fablab environments enables learners to collaborate to fix or make things while learning from one another. Smart tools, rapid prototyping, digital fabrication, and computational technology unite with open source platforms to share ideas, solutions to problems and designs of things individuals can make.

## **14. Multilingual Learning (language tribes)**

Multilingual learning enables individuals to increase metalinguistic and metacognitive abilities, such as the ability to draw comparisons between different languages and to reflect on and employ appropriate learning strategies.

## **15. Authentic Learning – Real World Activities**

Builds learners' capacity in all four domains of learning; cognitive, affective, psychomotor and conative. Authentic learning typically focuses on real-world, complex problems and their solutions, using role-playing exercises, problem-based activities, case studies and participation in virtual communities.

## **16. Passion Projects – Learning without Limits**

This methodology enables learners to explore and focus on specific or holistic concepts they are interested in and attach their purpose to passion, to cultivate a lifelong love for any learning areas which interest them.

## **17. Deeper Learning**

This challenges the learner to conduct a deep dive, which means performing an extensive analysis of a subject or problem. Deep dive learning is a technique to rapidly immerse a group or team in a situation for problem solving or idea creation. It is often used as a brainstorming or process development tool.

## **18. Design Thinking**

A creative process that helps learners design meaningful solutions in or outside of the learning community. Design Thinking is a methodology that provides a solution-based approach to solving problems by prototyping to a successful outcome.

## **19. Mobile Learning**

Describes the capacity to distribute learning via online and mobile devices anywhere, anytime. Mobile learning is only in its early stages of development. Learning through 'blended'

approaches, ie. using mobile technology and face-to-face methodologies, has increased the possibilities for learning and will assist to revolutionise the future of learning.

## **20. Learning Through Adventure**

This can be both broad and specific and might include a physical or cultural adventure, or a socio-economic adventure. Learning through adventure is a viable opportunity for learners to merge their passion with deep learning.

## **21. Internship Based Learning**

Internships are a valuable way for learners to gain first-hand experiences of a work environment and culture, and to develop the skills and competencies required for future employment. It enables learners to use the workplace environment to assess and evaluate real experiences with their perceived reality.

## **22. Boot Camp Learning**

The boot camp concept - often known for its high intensity, physically demanding fitness camp - has now transferred to learning where the focus is of a similar highly intensity and targeted to the development of a specific skill or understanding in a short period of time.

## **23. Agile Learning**

A flexible approach where participants take incremental steps, continuously review and use an iterative design process where trial and error, and learning and doing occurs. In an agile learning environment, the learning participants gain new competencies directly linked to their work context.

## **24. Research-Based Learning**

Involves learners in authentic research projects, often linked to deep learning either in individual or collaborative contexts. Research techniques are introduced to learners in as many contexts as possible to develop the skills of interpretation, analysis and application.

## **25. 'Open Space Technology' Learning**

Empowers learners or a community involved in a learning process to set their own agenda. Learners are given the opportunity to develop real solutions to real challenges outlined by the group itself.

Some schools or educational establishments choose to focus on one or two of the above methodologies, but in a new learning paradigm a diverse range of methodologies is crucial to cater to the unique needs of every individual in a learning community. Realistically, any learning guide might have the capacity to successfully deliver six to ten of the methodologies from the list of 25, which might form the 'toolkit' they draw from. In a collaborative learning context the aggregation of multiple teacher capacities and strengths should provide a rich variety of methodologies to diversify the learning experiences in the overall community.

Exposing learners to as diverse a range of learning methodologies as possible remains a vital component to preparing them for an agile and uncertain future global landscape.

## **Act Now**

To deliver diverse learning methodologies, a learning community must consider how the learning design experiences they offer reflects the broad skills and competencies learners require to best equip them for tertiary learning or future employability. Below is a list of actions to take to broaden viewpoints and encourage change.

### **1. Research the 25 methodologies**

Familiarise yourself and your learning team with the 25 methodologies document. Discuss learning approaches and assess and evaluate whether your team is using any methods listed and if there is room for improvement. An in-depth discussion around any newly discovered methodologies might form the basis for embedding new ideas relevant to your learning community.

### **2. Survey learners on the methodologies**

Survey your learners about their preferred methodologies, how they learn best, including the skills and competencies they feel they are developing relevant to each methodology. Use the data to discuss and decide if your learning community offers a rich tapestry which includes core skills. Encourage learners to communicate the methodologies they would like to experiment with or discover.

### **3. Experiment and evaluate new methodologies**

With your learning team, create a sub-list of methodologies not commonly used and enable experimentation. Encourage a 'fail forward' mindset. Include learners in the experimentation phase and allow them to evaluate their engagement with any new methodology. Use evaluations to open up a discussion forum on the most effective methodologies and reflect on their feasibility in the context of your learning community.

### **4. Observe**

Create observation opportunities for educators to experience a particular methodology to develop their learning experience toolkit. An effective approach would be to enable the learning team to communicate any methodologies they are skilled in and to facilitate observations with educators who express novice knowledge of a particular methodology.

## **5. Track the use of methodologies**

Track the use of diverse methodologies to capture the breadth of their use. Communicate regularly with your learning team on the diversity of methodologies being deployed and use the evidence to encourage continued experimentation.

## **6. Share ideas**

Create and share a bank of learning ideas and examples of methodologies with your learning team to increase capacity, skills and competencies.

## **7. Collaborate outside the learning community**

Use outside agencies such as businesses, think tanks, governments and educational departments to collaborate with and gather the most current information relating to learning methodologies to relevant job skills. Outside agencies may be used to enhance knowledge and competencies through training and development opportunities with everyone in the learning community.

## **8. Ensure continued growth programme development**

Facilitate continued training and development opportunities for educators by using all the above steps in the process of actioning change. Growth programmes enable educators to remain up to date in delivering diverse methodologies and exposes them to new trends, whilst ensuring they remain professionally relevant and effective.

# **Examples in Action**

This section includes examples of schools, organisations and education departments who deliver specialist programmes on one of the diverse learning methodologies. In some cases methodologies overlap with organisations demonstrating more than one exemplar approach.

## **1. Place-Based Learning**

[20 Schools and Networks That Educate With A Sense of Place](#)

This site links to 20 examples of schools and organisations specialising in place-based learning.

## **2. Experience-Based Learning**

[Anastasis Academy](#)

An experiential learning-focused school that enables students to explore the world through research and play.

## **3. Peer-to-Peer, Crowd-Sourced & Social Learning**

[The Participatory Budgeting Project](#)

The Participatory Budgeting Project empowers people to decide together how to spend public money.

#### **4. Project-Based Learning**

[High Tech High, San Diego](#)

A pioneering school specialised in extending thinking around deep project-based learning approaches.

#### **5. Challenge-Based Learning**

[Challenge Based Learning Centre](#)

A centre that specialises in frameworks, resources and strategies to incorporate the design of challenge-based learning.

#### **6. Play-Based Learning**

[Institute of Play](#)

Committed to empowering young people to navigate their way to a promising tomorrow by making learning irresistible.

#### **7. Nature-Based Learning**

[The Living Earth School](#)

A nature-based learning community with educational programs drawing from both ancient and modern wisdom to empower students to become better caretakers, mentors, and leaders of nature.

#### **8. Sustainability-Based Learning**

[Green School](#)

Known as the greenest school in the world, it is as much a part of the jungle as the jungle itself. This school is completely blended into the ecosystem, is built of reeds, trees and wood and uses elements from nature as learning tools.

#### **9. Phenomenon-Based Learning**

[Learning Starts From a Phenomenon](#)

A new curriculum designed for Finnish comprehensive schools which breaks boundaries between subjects, changes the role of teachers, and highlights students' learning skills.

#### **10. Game-Based Learning**

[Quest to Learn](#)

A public 6–12 school with an innovative educational philosophy which uses games to carefully design student-driven systems that are narrative-based, structured, interactive and immersive.

## **11. Service Learning**

[The International School of Brussels](#)

A school where at least 45 of its students are out each weekend engaging in service learning projects. Service Learning is a core component of The International School of Brussels' academic and socio-emotional programme.

## **12. Social Entrepreneurship-Based Learning**

[14 Experiential Learning Programs for Social Innovators and Social Entrepreneurs](#)

This site provides links to 14 schools and organisations that deliver learning programmes committed to social entrepreneurship.

## **13. Learning by Tinkering/Making**

[Tinkering School](#)

A school giving learners real tools to solve real problems. By learning through doing, they strive to make mistakes and learn from them, collaborate, try harder than usual and build things bigger than themselves.

## **14. Multilingual Learning (language tribes)**

[Multilingual Learning Network](#)

An organisation with a mission and passion to work with school communities to develop and maintain dual language immersion programs so every student has the opportunity to become multilingual.

## **15. Authentic Learning – Real World Activities**

[Authentic Learning: what, why and how?](#)

Blog on the importance of learning by doing rather than learning by listening or observing.

## **16. Passion Projects – Learning without Limits**

[Matthew Moss High School](#)

A School where students are encouraged to connect with their passions. They take part in a programme called My World where they choose the projects they want to carry out, driven by their own interests.

## **17. Deeper Learning**

[Catholic Education Diocese of Parramatta](#)

The Catholic Education Diocese of Parramatta, a system of almost 80 academic institutions and 40,000 students, and one of the first systems to adopt the deeper learning methodology.

## **18. Design Thinking**

[HPI School of Design Thinking](#)

A pioneering school in the development and dissemination of design thinking,

where the focus lies in the teaching method, the cooperation with project partners and the research and development of design thinking.

## **19. Mobile Learning**

[mSchools](#)

Empowers students and teachers to integrate mobile technologies into the classroom, opening up new ways of teaching and learning that improve achievement and employability.

## **20. Learning Through Adventure**

[Rift Valley Adventures](#)

An adventure facility sitting inside a wildlife conservancy. The centre delivers learning through adventure by bringing learners up close and personal to the surrounding wildlife.

## **21. Internship Based Learning**

[Las Positas College](#)

A College Work-Based Learning Initiative dedicated to helping create links between theory, knowledge and skills gained in class into practice. These links make for better students and better employees.

## **22. Bootcamp Learning**

[Bootcamp Learning](#)

Awarded as the Best Training Company of the Year, 2016 by World HRD Congress, bootcamp learning offers experiential learning solutions through its innovative and differentiated approach.

## **23. Agile Learning**

[Agile Learning Centre](#)

An independent school for self-directed learners. Students at Agile Learning Centers individualise their learning within the context of a supportive community.

## **24. Research-Based Learning**

[Bookend Trust](#)

A not-for-profit education initiative that seeks to inspire students and their communities with the positive environmental careers they can build to make the world a better place.

## **25. 'Open Space Technology' Learning**

[Open Space Technology Introduction](#)

Brief animated video introduction to open space technology learning.

## Further reading

[What's the Difference Between Project- and Challenge-Based Learning, Anyway?](#)

[What is Lesson Study?](#)

[Teacher Development Trust](#)

[Mobile learning: Smart education system for India](#)

[Teaching: Best practices from around the world](#)

[Realizing Human Potential in the Fourth Industrial Revolution](#)

[Overview of Learning Styles](#)

