SIMON KAVANAGH

LEARNING ARCH DESIGN

A method for unlocking student engagement and ownership of learning through packaging the pursuit of knowledge & creating a call to adventure...

THE AUTHOR AND CREATOR OF LEARNING ARCHES

Born in Dublin. Simon received his B.A. in Art & Design Education from the National College of Art & Design (a joint degree incorporating 3 years of Visual Communication) at 21, 1996. Here he already found the need to challenge educational norms through making art more relevant to students especially from social and economically challenged communities.

For the next 5 years, Simon worked as Creative Director and entrepreneur in the Irish Multimedia Industry. During these years he designed, programmed or managed approximately 600 titles and set up offices in New York and Paris. In 2001, he became a consultant for Windmill Lane Studios in the areas of Interactive Television, Content Management and Educational Systems, and Online Gaming before moving to Paris to further his career in digital media and art. He re-embarked on the educational path in Shanghai where he lead the BA Faculty of Visual Communications for a British degree in new media, design and culture for 3 years.

In 2006, he sought and found the most experiential leadership education in the world (www.Kaospilots.dk). Here, he continues to explore alternative approaches to education and pedagogy with the long-term goal of rebooting the 3rd level educational system through experiential learning design, strategies and transformational learning journeys which...

'INCREASE THE BANDWIDTH FOR CREATIVITY, INNOVATION, ENGAGEMENT AND RISK IN EDUCATION'

CONTENTS

Design learning that unfolds and builds ownership, craft, talent, genius whilst sustaining the flow, transparency, challenge and impact.

INTRODUCTION

Finally, a comprehensive description of one of the best and simplest ways to visualize learning, known as The Learning Arches (LAs). After over seven years of application, development, exploration and evaluation of the learning arches by thousands of educators, trainers and consultants worldwide, spread through the courses of The Kaospilot Learning Design Agency (www.Kaospilot.dk/KPlda), I felt it was time to share the method. For me, it's the most effective method for defining, designing, delivering and discovering learning journeys and programs of any duration and for any age or target group. It supports learning that is more engaging, transparent, autonomous, action based, co-creative and transformational, the bottom line of the human-centred Kaospilot pedagogy. If you are a learning designer who aims to create and anchor such a pedagogical approach, then this is the tool for you. *(Read on)*

The purpose of the Learning Arch method is to increase the bandwidth for risk, engagement, creativity and innovation in new and existing curricula and programs. Using LAs we design highly effective learning journeys where the pursuit of skills, knowledge, attitudes and values are unfolded, unpackaged, discovered and embodied. The method creates and shares ownership and direction for the learning between learners, peers, near peers, teachers, facilitators and trainers. We use the powerful and simple visual nature of the LAs to invite the students into the program and share the narrative, opportunity and frames of the learning journey.

We reveal the adventure and share the highlights, tension, flow, high and low action, peaks and drops.

We clarify the work load, grouping and evolution of content and the thoughts behind the overall learning arch, learning style(s) and approach.

This method faithfully supports the interweaving and dynamic intersection of SKAV (Skills, Knowledge, Attitudes & Values) as absolute equal elements in the learning strategy in order to increase engagement, craft and confidence through experiential learning, exploration and reflection. It creates ownership and transparency from the beginning of the learning process for the people who matter the most, and who we as educators should always be in service of, the students, learners and participants! It visualises, the formatting and unpacking of content and its relevance, connection, intersection and purpose.

The LAs literally bridge and stimulate the connections between subject, content, time, learning purpose, methods, and personal development through individual, group and team-wide learning. It brings to life curricula as learning processes which aim to achieve a higher level of mastery and craft by speaking to a higher and often unmet and unseen capacity in our current students. LAs inspire students and teachers alike to reach a greater learning ambition by increasing complexity and challenge through creating and altering safe learning spaces, learning frames and contexts.

This publication aims to introduce the reader to the learning arch method and its origins, how & why to use it and advice for the design and delivery of powerful, engaging and meaningful learning to current & future generations.

THE ORIGINS OF LEARNING ARCHES

My journey towards the development of LAs started in 2009 when I became the headmaster of the Kaospilot school of enterprising leadership in aarhus, Denmark. At this time, the school was well established as a leading institution within alternative education having been founded in 1991.

> "The Kaospilot is a hybrid business and design school, a multi-sided education in leadership and entrepreneurship. Our purpose is positive social change though personal growth and enterprise. Our mission is to grow an extraordinary school in which people love to learn and love to create. We want to make a place and a space in which creative people become creative leaders, and where ideas, dreams and values become reality." www.Kaospilots.dk

In 2006, I was an educator running a BA in visual communication in shanghai, on the hunt for a new pedagogy, when I discovered the Kaospilot. I immediately aligned with their purpose to support learners to create new sustainable and scalable solutions to existing and unmet needs within complex and turbulent situations whilst acting with empathy and ethics. The learning arches emerged as I sought to make sense of the Kaospilot's transformational 3 year program as I developed their new curriculum in 2009. I needed to understand and make tacit the non-tacit nature of the intense emotional learning culture that had evolved over 15 years and learn how the learning journey was defined, designed, delivered and measured. As a result, a visualised learning journey emerged, and with it, the adventure and rollercoaster ride that is the 3 year full-time Kaospilot education was revealed.

Once visualised*, what stood out was learning in equilibrium. A balanced dance between moments of high and low action[1], complexity and challenge and inter and intra-personal learning.

For the first time, the constellation of impact, value, subject, social, emotional, collaborative and creative competencies with personal craft and leadership was comprehended. This KP secret X was now decoded and understood. We now knew how we did it, why it worked and how to improve it through design, delivery and discovery. We could now play with the key parameters of Structure v Chaos, Frustration v Breakthrough, Action v Theory v Reflection to bring the hidden curriculum[2] alive and how to track, measure, support, guide and communicate it to the students, our community and stakeholders.

We had not only visualised the learning journey, but we could now explore and tweak how best to interweave skills, knowledge, attitudes and values to support the student's learning adventure on an individual, group and team level across the 3 years.

"Training and learning on individual, group and team levels through action-based learning can prepare the graduates to work, lead, follow, support, adapt, reflect and collaborate on the same or similar levels inside teams, organisations, society and other systems."

We could now consciously set, hold and land the learning space and periods of time or arches. How little content and time are enough? This became our most powerful and philosophical question in juxtaposition with fluctuating levels of intensity, challenge, reflection, theory, context and relevance.

Three Years later, whilst reading Experience and Education by John Dewey, the full potential of the method hit me. The learning arch method could be shared to all learning designers to support them in increasing the bandwidth for creativity, innovation, engagement and risk in education.

The KP had found its IP (Intellectual Property) to 'Package the pursuit of knowledge'[3] and we decided to share it in a fair, affordable and scalable way. Since then, through providing multiple short programs based on our core learning design methodology to support the emerging educational 'reboot' revolution, we have trained over 4000 learning designers from 40 different countries and from 250+ universities.

*Inspired by Kaospilot Creative Leadership.

Footnotes

1 **'High Action'** refers to periods (arches) of applied and experiential based learning and practice.

'Low Action' refers to the periods (where we land the High Action arches) with both reflective learning of self working with others and the evaluation and analyses of subject, level and competence.

2 **'The Hidden Curriculum'.** Although explored by Dewey and coined by Philip Jackson, I refer to it as the 'conscious learning objectives and outcomes that support the intra-personal and inter-personal growth and development of the student to explore their mindset, attitudes, behaviours, competencies and values. This is done by continuously shifting the contexts and scenarios to challenge, support, confront, confirm and anchor the most relevant and powerful skills and knowledge (for a subject or discipline) through individual, group and team-based action, reflection and analytical learning designs in order to increase confidence, ambition, and rigor. In order to really anchor and secure these attitudes in your programs and practice you must include them in your curriculum as learning outcomes, on par with skills and knowledge to inaugurate them as part of your academic and educational vocabulary.

For me the bottom line is how to bring it alive? How do you find and design powerful ways for students to execute skills and knowledge which allow for authentic embodiment of the attitudes, mindset and soft skills so that when they talk about them (at exams, evaluation and job interviews), they can speak from a deeper and personal understanding of them, what they mean and how they could apply and adapt them to any given context.

If you are not giving students real & increasingly challenging experiences to gain a deep working comprehension of Skills, knowledge and attitudes, you are failing them and society.

3 By **'Package the pursuit of knowledge'**, we mean experiential learning applied within a safe and experimental education, which supports risk-taking, failure and innovation. Run in partnership with multiple instructors and diverse students as co-learners and facilitators, offering their experience and knowledge together with current industry input and trends.

WHY & HOW?
WORKING WITH LEARNING ARCHES

The Learning Arches (LAs) are a method to design transparent, collaborative and experiential learning journeys or processes that maximise engagement, capacity, ambition, ownership, confidence, relevance and most importantly, dialogue between the learners and hosts, facilitators, instructors or teachers as stakeholders of the learning.

As stated already, the Learning Arch Design method is a simple way to bring learning alive. It visually translates and interprets the curriculum into an exciting learning journey and invites colleagues and students alike to co-create, design and deliver the adventure. LAs are a clear way to reveal the learning journey and unfold the narrative of the proposed user experience and the teacher's and student's role in it. Use them to share and describe the design, thoughts and logic of the learning journey you have created and make the call to adventure and the 'big picture' literally drawn from the written curriculum. This 'big picture' also provides a chance to see the curriculum beyond solitary blocks and stimulate flow, connection and continuity of learning, challenge and growth towards mastery of any given topic, subject, discipline or craft.

Learning arches can support the creation of your own style of facilitated learning. They provide a flexible structure or learning scaffolding to allow for more creativity and confidence in designing, delivering, discovering, pacing, unfolding and supporting learning for all levels and ages. They allow for more exploration and deviation from the plan to go where the energy is, knowing that you and the students can return to them and land or check in at any point! It supports what we at Kaospilot call to be **'overprepared and under-structured'.**

The more trust and transparency you create with the students in terms of setting, holding, landing, through listening, adapting and feeding forward their needs, the more likely they are to stay engaged in the bigger (overall) arches and the incremental increase in challenge, complexity, and ambition of projects & deliverables. This is the key to framing transformational learning.
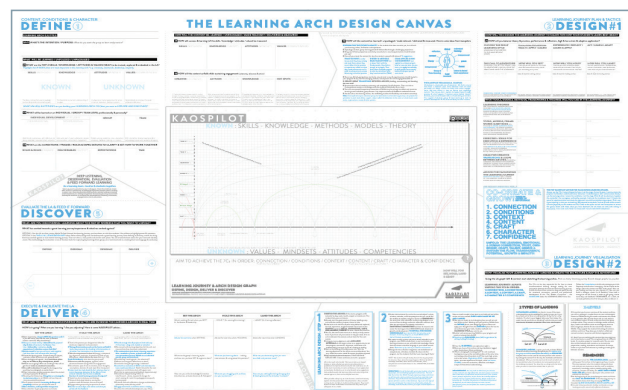
The Learning Arch Design Canvas (LADC) is the result of 6 years of work. It embodies the experiments, learnings and evaluations from multiple learning design courses with hundreds of educators.
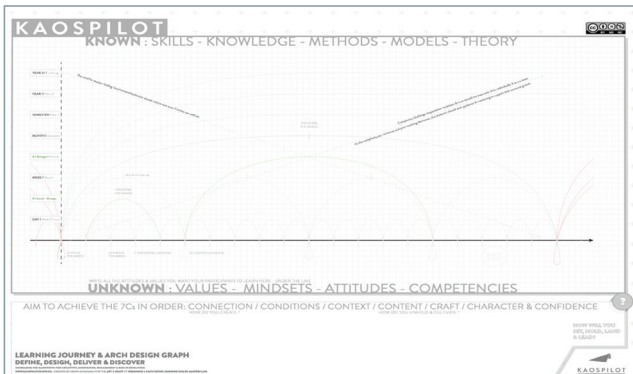
The canvas frames a design process for developing and running experiential & transformational learning journeys. Using the 4Ds of define, design, deliver & discover, it creates and supports the collaborative design, hosting and facilitation of autonomous, adaptive, action-based and risk-taking education. It utilises the 7Cs at its core to create and sustain engagement, alignment, ownership and direction for the learners.

THE LADC FRAMES

The key questions and points to consider when designing powerful and relevant learning journeys.

- How do you create, unfold & cultivate skills, knowledge, attitudes and values?
- Design for individual, group and team learning on a professional & personal level?
- Define what are the conditions, frames, roles & expectations to clarify, and 'set' for how you would like to work together?
- How will the content be learned, unpackaged, made relevant, delivered & measured?
- How will you facilitate the unfolding of content and the LAs?
- How will you balance theory & practice, performance & reflection, high & low action & adaptive application? *(see page 14)*
- What learning styles, tools, models, methods, frameworks & theories will you use in the learning journey?
- Visualise your learning journey (arches) to create and share the big picture and map the adventure?
- What are you (and your students) learning & discovering while you are running the LAs in real time?
- What are you (and your students) discovering / learning about this way of working that you want to unfold more of?
- How to apply deep listening, observation, evaluation & reflection and feed it forward?

The LADC method is introduced in part 2 of the A&CDFLS (link https://www.kaospilot.dk/acdfls2)

'Learning style' definition *(see page 14)*

WHAT ARE THE 7Cs

The 7Cs are the key sequential list for how to set and create for transformational learning that maximise connection, conditions and context between the learners & the learning journey first before content. This shifts the focus from content as king and opens the way for personal connection and ownership of the content, subject or discipline.

It sets the platform for an emotional connection to the team of students and invites for personal and professional development and commitment, core to delivering the 'The Hidden Curriculum' and the 'unknown' below the LA time line.

1. CONNECTION
Make a connection with the students and meet them where they are at (knowledge, social, professional & emotional).

2. CONDITIONS
Set the conditions for how you will try to work together, the learning styles you will explore and how you will collaborate by clarifying expectations.

3. CONTEXT
Make the case for what the students are about to learn and why it is useful, relevant, emerging and even powerful.

4. CONTENT
Adjust, unfold & unpackage the content based on the need, level and ambition of the students and your design. Define what success is and then aim to over deliver…

5. CRAFT
Unfold and increase the learning, challenge (practice) and measurement to support risk and a deeper understanding of the subject and craft (methods supported by theory). As the teacher leaves the stage, the students step up and perform through application, (self)reflection, analysis and leadership.

6. CHARACTER
Should grow as their understanding deepens through increased complexity of tasks, alternating contexts and delivery within groups of peers whilst seeking to create sustainable impact & value.

7. CONFIDENCE
The student's ability to set their own targets beyond their current expectations. To define and take more control of their (learning) potential, behaviour, actions and direction.
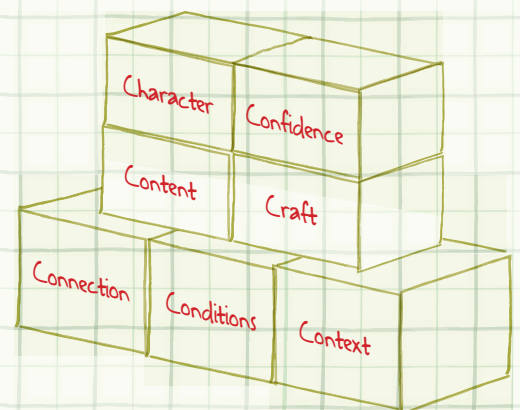
LEARNING ARCH
DESIGN STEPS IN BRIEF

Step 1

- Sketch the arches of the course, program and/or semester. One arch per day, week, month, subject or module etc. This is taken from your curriculum. Print out the A3 LA graph (see page 5) and sketch or download the app.
- From the outset, start the good practice of always labelling every arch with the content, purpose, theme or title.
- Land each arch with the content to be delivered, explored, learned, experienced, taught & tested. Focus here on the known (content) skills, knowledge, methods, models, and theory all what is above the time line.
- You can also work more micro on an hourly or daily session basis. If you have only one session or day per week, draw an arch in between the sessions and set tasks for the next session.
- Using your own judgement, add a mid arch intervals on the larger arches as an opportunity to ask into progress, connection, alignment, satisfaction and understanding. It occurs as part of a setting or landing.
- Start at the landing of the big course arch, with the learning objectives for the entire course and back cast. You may realise that some weeks & content should be adjusted, moved or swapped.
- Play with the balance between confusion & structure. Create confusion, but with a purpose! Be aware of breakthrough versus frustration.

> **NOTE:**
> - Always sketch first and early. Do not seek perfection first time, as its impossible and will only hinder your creativity.
> - The process is relative, so you can break your course down and develop arches for morning and afternoon sessions, exercises or any class periods or duration. This is very helpful when you are with your students for short periods or classes each week.
> - In this case, the LAs can help you be more ambitious with your learning designs of limited time by 1) create arches between your sessions and 2) group your sessions (x-level arches) to Act, Learn, Adapt. Always, set & land the sessions and x-levels.

All arches need to be landed. So, determined what SKAV you want to land on and what do we want to carry forward on a professional and personal level, by using looped landings. Remember when sketching, that you will learn more as you run and evaluate the program incrementally. So factor that in to the design, to feed-forward recommendations etc. that worked towards the optimal learning style, culture & conditions.

Always try to invite business, social and industry experts into the process and/or the presentation. Also, consider inviting alumni and future students of the program. They often become its best ambassadors and share the story about the future program, and your willingness to co-create & innovate.

Step 2

- Under the horizontal line, write the course/arches values, mindset, attitudes, and competencies that you would like the student to explore and grow. These are unknown in the sense that most educators and learning designers, are unsure of how to design and measure authentic exercises that allow the participants to embody and reflect. To bring alive the hidden curriculum. Explore how to set and land in order to make an emotional connection on an individual, group and team level that support personal growth and development.
- In order to really anchor and secure these attitudes in your program, you can include them in your curriculum as learning outcomes, on par with skills and knowledge. Name them to create a common language in your school around them. Back them up by industry as relevant and essential.
- Design for the authentic integration and embodiment of competencies, attitudes, mindsets & values into the program. Let the students find their own meaning of them!

> **NOTE:**
> We visualise setting & landing the arch lines by going below the time line. This is where the magic happens. We think of skills & knowledge above the line, as 'known' and attitudes, values, competencies and mindsets below the line, as 'unknown', aka the hidden curriculum.

EXECUTION:

Execution is landing on the **'What'** and **'How'**. **What** will the students produce in terms of results, output, value & impact. **How** was the process on an individual, group & team level. It's through the evaluation of the how/process that the attitudes will be learned. The bigger the arch, the bigger the landing. Figure out what type of execution will allow for the students to authentically embody the SKAV and how you might frame, reflect and evaluate.

One of the best gifts we can give students is that of powerful, real and challenging projects and exercises. These support the students in expressing a deeper understanding of the SKAV together with a deeper comprehension, further theoretical analysis and how they feel about it.

> **NOTE:**
> Always provide students with situations that occur in the real-world which require them to apply their relevant skills and knowledge and grow their values, character, mindset & attitudes.

> *"We do not learn from experience... we learn from reflecting on experience."*
> *John Dewey*

Step 3

Now we need to explore how best to set, hold and land all the arches we have created. Every arch must be set and landed.

- Now you are ready to start designing how you will set and land all the arches. Working with your primary SKAV, design and apply your thoughts & ideas for how to set and land as well as what tools, models, methods and learning styles you want to use.
- Anchor and secure your key SKAV in your program and practice to keep them alive.
- Draw the X-Levels. *(see page 23 for explanation)*
- When you have all the arches and days labelled or tagged and x-levels drawn, share and discuss.
- What is emerging & revealing itself? Fx: arch overload, landing too many arches and deliverables at the same time, not landing arches & content at all? Too much high action and no low action. High action (do) = active experimentation, concrete experience & impact, while low action (think) is time for evaluation, reflection, deeper analysis and theoretical understanding.

NOTE:
Now consider & include : transformational and authentic learning (experience) design; risk taking & hotspots; values, feedback culture; real clients; problem & process-based learning; Team based pedagogy & collaborative learning; intra & interpersonal learning; participatory teaching methods; learning communities; transparency, feedback & reflection.

MEASUREMENT:
If you want to really anchor the potential in attitudinal and personal development, you will need to find ways to access, harvest, feed-forward, share, land and follow the students and the group's growth.

You may need to rethink how you measure success, and even one step before that, ask what success is and what does it look like on a professional and personal level? If the students share a powerful experience, all you need to do is develop reflective questions that can support further learning, deeper analysis and ownership of it.

To anchor the potential in attitudinal and personal development you will need to find ways to assess, harvest, feed-forward, share, land and follow the student's personal and team' growth. *(see pages 18-19)*

WHAT IS TEAM BASED PEDAGOGY (TBP)?

Simply put, the students as a learning organisation. They learn how to learn, support and value each other's growth and development as leaders, managers, practitioners and game changers. A team-based pedagogy provides the opportunity to experience authentically the following...

Creative Reasoning & Problem Solving (Lateral Thinking), Common Culture, Language & Frames, Emotions, Collaboration, Vision, Passion, Capacity, Communications, Relations, Leadership, Empathy, Direction, Responsibility, Trust, Choice, Peer Learning & Feedback, Group Discussion & Reflection….

"The bottom line is that learning arches help you move from the archaic teach > learn > perform / test learning style, sustained by the old guard who are change averse and held by procedures, policies, regulation, top down control and ultimately a generational misalignment to the contemporary and emergent styles of learning.

Learning arches exploit an act > learn > adapt > repeat learning style, which supports a more adaptive and collaborative self-efficacy and leadership model which speaks to a higher capacity and ambition in our students and aims to educate and develop them to create their own future as reflective activists."

15 TIPS TO CONSIDER WHEN DESIGNING

Always set and co-create the frames and learning culture together with the students based on your first LA draft. Define and design through transparency, alignment, commitment, clear frames and direction for the class, weeks, modules and semesters and then deliver, lead and hold it using the arches as a guide or map.

01 SET the full program through telling the story of the arches. Include the highlights and share the tension, flow, high and low action peaks and drops, work load, grouping and sequence of content (X-Levels) and the thinking behind the overall learning style(s) you propose and why.

02 Invite the students to be part of the learning journey and then create and host it with them arch by arch through dialogue, testing & evaluation.

03 Create the context, the case and the experience to make the content, theories and methods relevant and meaningful to the learners.

04 Set the desired working conditions and pay attention to the group dynamics and diversity. Explore how different learning styles support different learning capacities to discover the balance of experience, culture, openness and needs in the team.

05 Working on the three learning levels, individual, group and team, ensures that the entire team share the same methodology and/or experience. This allows for shorter and more productive reflection and sharing of different levels of success. Therefore, design student activities which execute and embody SKAV (authentically).

06 Figure out when to support with new knowledge through just in time learning by pop up knowledge and creative disturbances.

07 Design the perfect day, session, class, week with the students and when and how to activate literature or reading material in connection with pre-arch preperation.

08 Bring the learning outcomes including attitudes, mindset (hidden curriculum) alive and co-create a shared vocabulary around them.

> *"...those teachers who are students of their own impact are the teachers who are the most influential in raising students' achievement."*
>
> *John A.C. Hattie*

09 Explore how to 'un-package the pursuit of knowledge'. Create a clear overview of the modules in a semester and co create how to unfold the content so they interact and build on each other in developing an engaging learning journey.

10 Balance the teacher's role and input versus the autonomy of the students. Consider that as the diagonal line of teaching and leading (from left to right) decreases, the level of learner autonomy needs to grow through increased challenge, expectation and ambition within changing contexts.

11 Clarify that all feedback, suggestions, modifications and improvements will be made if possible and applied to the next version of the course or applied forward to this version.

12 Start at the landing point and establish the learning outcomes on a skill, knowledge and attitudinal level and figure out what you want the students to learn on an individual, group and team level. The latter is where the real gold is, but without a proper landing, all the wealth of professional and personal (intra and inter-personal learning especially) is lost.

13 Use Learning Arches to support ICT or online learning to map the virtual learning journey and establish the key touch points for guidance, new knowledge, support on an individual, learning group and team level and to maximize any offline meet ups, think thanks, flipped classrooms or projects.

14 Deepen the student's understanding of practice and application of the key SKAV by unfolding more complex exercises and tasks in multiple contexts throughout the program and maintain engagement and challenge. We need to break with the Academic cycle of check list learning in preparation for exams. As the diagonal line of challenge, expectation and ambition increases during the program/learning journey we should revisit the most powerful and relevant SKAV. This will deepen the student's understanding of practice and application of the key skills and knowledge.

15 Use LAs to reconnect and revitalize existing curriculum and programs that need to be redeveloped. Use when there is capacity for appreciative change and program improvement by staff to seek new content and challenge the legacy content. Interweave emotional connection and mindset development into the program. Support this where possible with stakeholders, current and past students and industry expertise with future talent knowledge.

Support this process with the Kaospilot Learning Arch Design app.

HOW TO SET
LEARNING ARCHES
Set the stage & the call to adventure!

Setting is the most important stage. It requires passion and ambition to push off and set the learning in motion. It should set the stage, culture, tone and mood for the entire learning period, module or semester. A call to adventure. It offers the best start for the study and learning approach and why what we are about to learn is relevant, useful and powerful! It shares the big and small learning agenda and inspires connection and ownership of the program and the shared learning agreement. (contract)

It doesn't matter how many times you have run this program it should be run like your first, every time, showing the passion you have for the topic and what the program will deliver supported by your actions. The perfect setting is achieved when all the students are aligned, committed and can comprehend the why, what, how and who of the program or arch and its bigger purpose, goals and direction. There is a shared understanding of **'What they are saying Yes! to'** and are excited and eager to start.

When we set arches at the beginning of a program, curriculum or education, we need to be aware of how many arches we are starting and the duration of them. In the Learning arch example, we are starting arches for 1st day, 1st Week, 1st Module, 1st Semester, 1st Year, the full program and maybe an arch that will support them for the rest of their life as professionals and lifelong learners. (No pressure!)
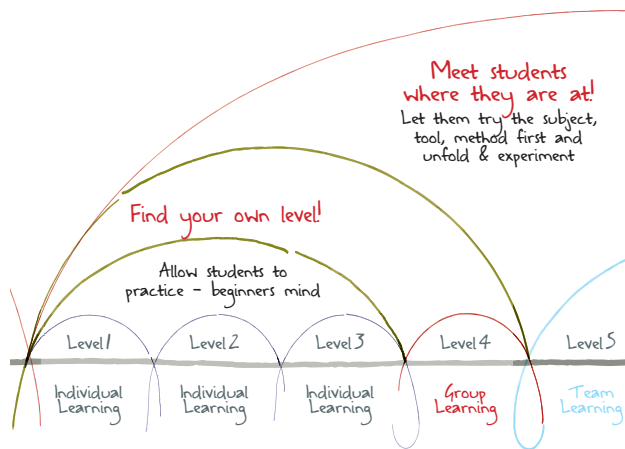
Always before we set an arch, we need to make sure that we land the previous arch. This is most critical when we start a new program or course on day one.
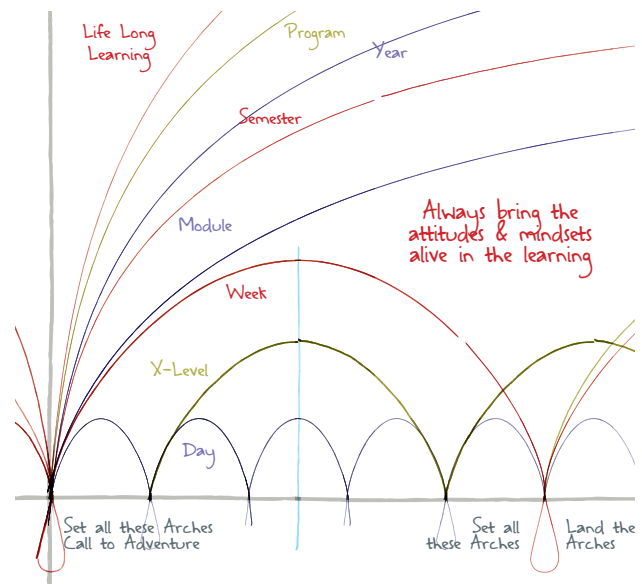
We must remember to land the multitude of individual arches that are the student's and learner's experience, interests and passions they bring with them. If engagement is the most anticipated need in education right now, we would be crazy not to tap into this passion and personal interest.

When setting any arch, you can decide to give the purpose and outcome of the learning in advance or not. I advice always to share the purpose until you have built some trust. The advantage of postponing the purpose, is that you avoid the immediate focus on the outcome, performance and assessment and let the students find their own level of understanding as an individual, in a group (collaboration, communication and co-learning) and then in plenum as a team (when sharing what

10

they know and do not know). This supports what we call **'Meeting the students where they are at!'**

Meet students where they are at!
Let them try the subject, tool, method first and unfold & experiment

Find your own level!
Allow students to practice – beginners mind

Level 1 — Individual Learning
Level 2 — Individual Learning
Level 3 — Individual Learning
Level 4 — Group Learning
Level 5 — Team Learning

This gives us a chance to test and evaluate the team of students core competencies, attitudes and capabilities to establish the level of knowledge and experience in the team. Then, adapt the Learning Arches and learning ambition accordingly. This can be done in the first week as part of a team building phase and to introduce the primary learning style of the program or course.

Every student deserves to know at the beginning of any learning period, why they are there, what they are going to do and how they are going to do it / work together.

DESIRED OUTCOMES

- Setting will create ambition and clarity around intention, learning outcomes, expectations, deliverables, culture, communication, roles and rules or guidelines.
- These are what we call the frames, and they should be set slowly and together in order to create co-ownership.
- Clarify what the team will do and the purpose of why and what they will learn. Share the SKAV, (with equal focus on mindset and competency development) which echo business, social and industry talent and growth needs for the future.

- Co-create the frames for how we will work together and focus on time / deliverables / outcomes.
- Explore and define the zone of excellence and clarify expectations.
- What we will learn on the different learning levels - individual, group and team.
- Where are we going? What are we doing? How will we get there!
- The tone, culture and mood are set but can also be revisited at any point to re-align and connect with the learning purpose, vision or goal.
- Meet the students where they are!

ADVICE FOR SETTING

- Most importantly, always LAND (the previous arch!) if you don't they won't do the work in between lessons next time. Why should they?
- Always co-create: clarity (what will we do), purpose (why and what will we learn), frames (time), expectations (deliverables, outcomes and what success looks like or could be)
- Set the mood for how you will try to work together (and show how it will enhance their learning).
- Create the learning team. Create frames to support, evaluate, reflect and share learning & experience as a team.
- Share the big & small agenda and then meet them where they are at! What do they already know, think and do?
- Where are we going? What are we doing? How will we get there! make an emotional connection.
- It's a call to adventure through the learning journey you/they have designed, so excite them!
- Create clear instructions and be passionate about the content and why it's powerful and relevant.
- Reveal the full journey. Using LAs as a visual guide to start every class, to set SKAV and how they are interconnected and combined.
- Set and prepare them for increasing challenge and complexity and how you all will work with it.
- Share decisions, seek input and be transparent.
- Give attention to group dynamics and create diversity in groups and in learning styles.

DIAGNOSTIC ASSESSMENT (SET)

A primary type of assessment, which is given at the beginning of the course or the beginning of a unit of study to assess the skills, abilities, interests, experiences, levels of achievement or potential gaps & difficulties of an individual student or a whole class. Its used to establish a starting point or baseline OR informal measurements (eg: observation, discussions, questioning, boot camps, projects, research & workshops). **Wikipedia**

When we set the arches, this assessment is used to collect data on what students already know about the topic or what we call to, 'meet them where they are at'. We then adjust & adapt accordingly - and are over prepared & under-structured in our delivery.

- Remember to land the **Pre-Course Arch**, as part of setting your first arches at the beginning of your course. This can represent what the students bring with them and what you can measure or test for, such as ambition, experience, knowledge, talent, problem solving skills, creativity, interest and ability etc. Meet them where they are at! and then adjust your LAs, content and ambition to their level.
- At the beginning of the course/program create and share the **'Call to adventure'** of the learning journey so the students know what they are saying **Yes!** to. Consider questionnaires & bootcamps to set.
- Consider drawing arches for holidays and breaks as major landing points for natural self-reflection & distance.

HOW TO HOLD LEARNING ARCHES

Holding refers to the facilitation or hosting of the multiple arch spaces between setting and landing.

Holding Learning arches, is the hosting, facilitating and leading of the learning experience and the learning space both inside the arches and between them. When we set and land, an arc is created to join them together, this creates the learning arch and a space inside called the learning space. This is the space we need to hold and host whilst we lead the learning journey through many arches simultaneously from left to right on the timeline. This includes the holding of the 'big overall arch or the macro learning experience/journey arch, and all the meso (x-level) and micro arches that are nested and grouped in this bigger arch & learning space.

All the learning spaces created between the multiple settings and landings and inside the arches need to be held & hosted. Setting and landing are also part of holding the space as they set and land the arch and therefore the learning space for that arch. So, holding is where the skills of facilitation, leadership and hosting come alive. It's the space where we practice the art of being 'over prepared and under-structured'. Where we pause, observe, question, measure, react and adapt in service of the learning, task and purpose.

These skills are key to any learning designer and educator who wants to increase the engagement and ownership of their learners for their learning journey. This is where the learning arch method can really support educators to STEP IN and take the roles of leader, facilitator and host, and prac-

tice these skills. Whilst holding, we use the LAs as a framework or learning scaffolding to create transparency, dialogue and collaboration. They clearly show how content and learning are interconnected and unfolded and emphasise the learning design to support the transition from safety of content and structure to exploration and emergence. They support and sustain relevance and interest through risk, autonomy, action learning, delivery & performance. Almost a gamification of the learning. *(see page 15)*

The arches can support a beginner's level of holding and the vulnerability that can come with it. Just be transparent and share thoughts, decisions and actions openly through dialogue & collaboration. As long as you set and land properly in accordance with Mid Arch Intervals, you will stay aligned, engagement will remain high and you will grow in confidence.
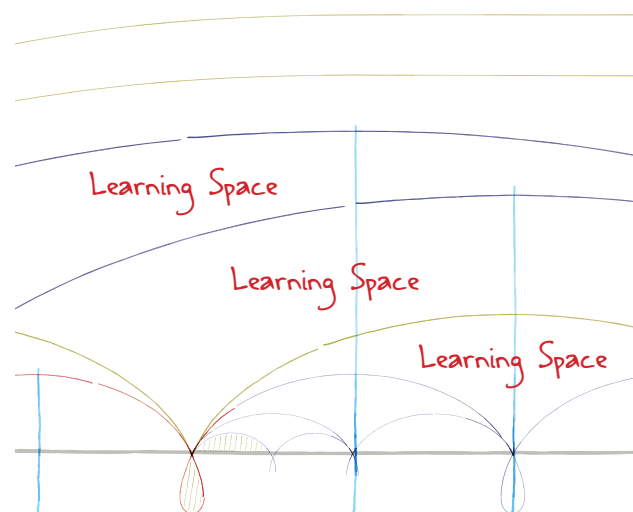
DESIRED OUTCOMES

- Space to zoom out and see the bigger picture again and the learning journey and narrative so far. Get a feeling for the current state of play and then reconnect the students with the meso & micro arches levels again.
- Ask into the connection and alignment of content and gauge the 'temperature' in the room as a form of feedback concerning what is needed, relevant or 'alive in the room' at that time. Mid arch intervals also support this.
- Offer individual guidance here and show that you have seen the student. Once the student feels seen by the teacher/facilitator they are naturally encouraged.
- Reconnect and align with the purpose, idoart, agendas, call to adventure and boost energy and focus if appropriate. Are we on track?
- Tweak and offer clear instructions and next steps for what can change and what cannot, and give reasons. You are not a magician, so just do your best to apply the feedback.
- Timeout! And adapt based on serving the students needs and interests for more or less of something.
- Engage the entire group and give space to all voices and be compassionate.

ALSO CONSIDER WHEN HOLDING ANY ARCH

- Be authentic, open and act on intuition and share your thoughts, assumptions and decisions.
- Seek input and be transparent, empathic and use humour ;)
- Changing the groups and their internal roles, the consequences, the complexity, challenge etc.
- "The students are human beings" so find the balance between push, pull, capacity and flow.
- Evaluate based on learning levels & the balance between confusion v structure and purpose v experience designed.
- Do not be locked into content and structure, be flexible and adapt.

Therefore, don't continue down unproductive roads or learning engagements. Stop!

CONSIDER WHEN LEADING AND HOLDING THE SPACE

- Create the space for experimentation and create alignment.
- Create and connect back with a clear purpose (idoart).
- Create the frames and rules.
- Find a way to be part of and participate in what you are teaching and learning.
- Be prepared to step back / and not provide all the answers.
- Listen to the space and ask into assumptions or mirror the group (share with them what you have observed – behaviour, actions etc.)
- Create the opportunities for co-creation and group work.
- Trust in yourself and the learning strategy and experience you have designed.

ADVICE FOR INTERVENTION

- Ask the right questions at the right time and always remember what you are working with, for and towards.
- As a best practice, ignore your first impulse to intervene and consider the short and long-term benefits of your intervention.
- Use intervention to speed up and slow down the learning to support decision-making and flexibility.
- Practice your sense of timing. It's hard and you will make mistakes, but evaluate immediately on your own or later with the group.
- If you are not sure whether to intervene, ask into the emerging state fx: rising confusion, silence, frustration, energy, engagement and act or not.
- Share your assumptions and encourage your students to do the same.
- Check for resonance in the group if you spot people disengaging.
- Check in, and act / reconnect with the purpose, the rules and remind all what they said yes / committed to?

ADVICE FOR HOLDING

- Share and trust in the process you designed and allow for continuous alignment and assessment.
- Time out! Take the temperature and show it! (feedback on energy, understanding, alignment, confusion, frustration and needs - take a stand! Are we on track?
- Reconnect with the purpose, agenda, call to adventure and boost energy, focus and engagement. Re-establish clarity, frames, expectations and deliverables.
- Timing of interventions and use the LAs to set/ hold and land as key moments for checking in.
- (no intervention is an intervention)
- Be Flexible, empathic & transparent. Share your thoughts, ideas, next steps and consequences of changes to the program.
- Be authentic, open and act on intuition, share thoughts, assumptions, decisions and seek input.
- Listen more (on a meta level) and share what you see, hear and mirror the groups behaviour and the effect of it and their actions).
- Embrace resistance and explore the social needs & underlying assumption, frustrations & needs.
- Engage the entire group and give space to all voices.
- Consider how and when to activate the literature and revisit learning outcomes and subjects as contexts change and become more complex (by design)?
- Understand your role & effect on the team and space.
- Clarify frames, expectations and deliverables.

FORMATIVE ASSESSMENT (HOLD)

'Given throughout the learning process, formative assessments seek to determine how students are progressing through a certain learning goal/arch or journey'. Wikipedia

Through Individual, group and team performance, observation and guidance during the learning process, based on increasing challenges and changing contexts we create a concurrent record of the students understanding, achievement & engagement. We always ask, What are we learning & discovering about the content & ourselves? What do they know, understand and can do? It is supported by just in time knowledge, disturbances, meaningful feedback, intervention & guidance and should inform learning journey adjustments.

LEARNING ARCHES
EXPERIENCE CONTROLS
Powerful questions and variables for LA design.

We believe in a balanced view of education. We find it crucial that there is balance (over time) between each of these parameters or design criteria to create and sustain engagement.

We have choice in how we format and unpack content. How do you learn, explore and apply theory through practice & what happens if practice comes before theory? Similarly, you cannot sharpen skills in a fixed setting or context. How do we develop Individual and group learning to enhance and support personal development, transformation and the essential ability to work in teams. Here are the key questions, taken from the Learning Arch Design Canvas, to ask when defining, designing, delivering and discovering learning arches. *(see page 4)*

Why

What's the intention / purpose?
- Why are we doing this? What do you want the group to learn and practice? Why is it relevant?

What

What SKAV will be learned, unfolded or unpacked?
- What are the top skills / knowledge / attitudes & values (SKAV) to be trained, explored & embodied in the LA?
- What will be learned on an individual / group / team level professionally & personally?
- What are the conditions / frames / roles & expectations to clarify & set how to work together?
- What tools, models, methods, frameworks & theories will you use in the learning journey?

How

How will the content be: learned / unpacked / made relevant / delivered, landed & measured?
- How will success & learning of the skills / knowledge / attitudes / values) land & be measured?
- How will the content unfold whilst sustaining engagement (Autonomy, relevance & action)?
- How will you balance theory & practice, performance & reflection, high & low action & adaptive application?
- How will you hold the learning?

How will you design the learning journey to tailor for how your students learn best (SKAV)?
- How will you balance the parameters of experience, reflection, learning, applying and adapting?
- How do you want your students to absorb, process, track, test, adapt and retain knowledge during their learning journey?
- How will your students embody the SKAV & be challenged?
- How will you bring the learning arches to life and make a connection and transition between them, the purpose & the participants?
- How will you create, facilitate and hold the connection, culture, context and content?

LEARNING STYLES

In short, learning styles refer to the ways people learn. A learning style is a concept of how people learn, sense, apply, act and respond. A learning style will have a number of stages or phases, which can be landed and looped, fed forward and interchanged to suit the teams learning styles. They should support and unfold the embodiment of the desired content: knowledge, skills, emotions & mindsets etc. for that learning arch, experience or block. A learning style frames the learning experience where the students can gain a working understanding of the content and its context, relevance and significance on a personal, professional, local and global level to help them construct their own world view over time and what they stand for!

Over nearly three decades, the kaospilot have somewhat perfected the KP learning style which interweaves creativity, innovation, engagement & risk through the intimate equilibrium of real practice, theory & reflection through a team-based pedagogy, alternating frames & contexts.
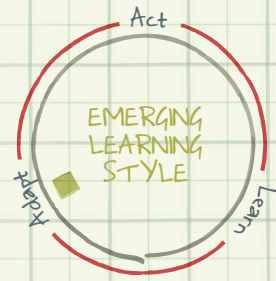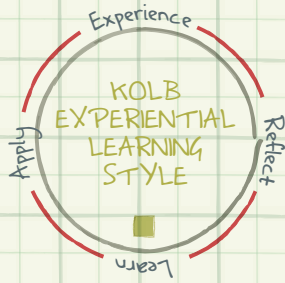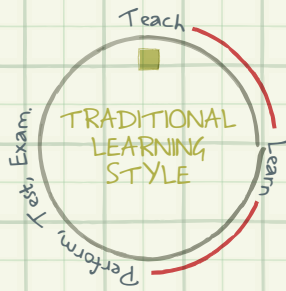
For me there are 4 core learning styles.
1) The somewhat archaic academic teach / learn / test - perform.
2) Teach / apply / learn.
3) Experience / reflect / learn & apply (Kolb).
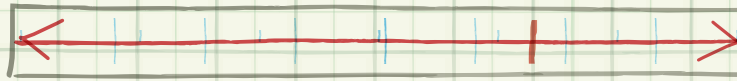*4) And my preferred style, act / learn / adapt / repeat!*

Of course, all have their relevance and uses and can be exploited throughout a learning journey to create more diversity and dynamism in learning delivery, especially when the team or class are diverse in 'how they like to learn'. Always choose the correct learning style for the desired learning experience & outcomes across the SKAV.

On the right you will see the 'Experience Control Panel'. This is an attempt to gamify and highlight the core variables to consider, balance and fine tune in order to create your own learning style and deliver an exciting and transformational learning journey. Or, just build on one of the core learning styles and then tweak the dials to taste! Consider, using them as inspiration for setting, holding and landing for students to evaluate and turn the high & low action (volume) up or down.
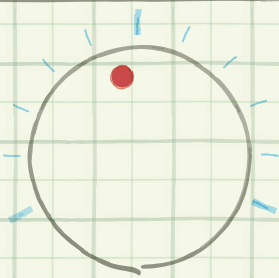
TRADITIONAL LEARNING STYLE

Teach

Perform, Test, Exam.

Learn

KOLB EXPERIENTIAL LEARNING STYLE

Experience

Apply

Reflect

Learn

EMERGING LEARNING STYLE

Act

Adapt

Learn

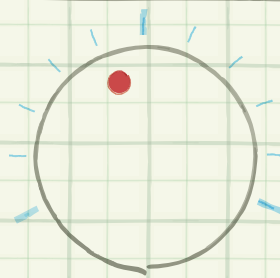Taking Eneregy Leads To More **Frustration**
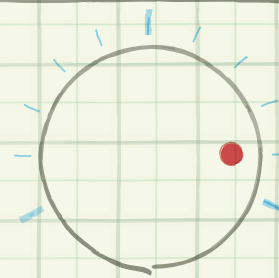
Giving Eneregy Leads To Personal **Breakthrough**

THINGS TO THINK ABOUT BEFORE YOU INTERVENE
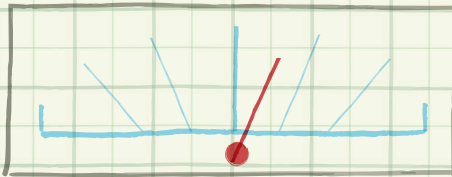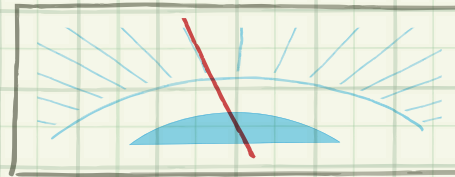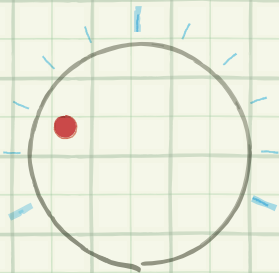
CONFUSION V STRUCTURE

PRACTICE V THEORY

DIVERGENCE V CONVERGENCE

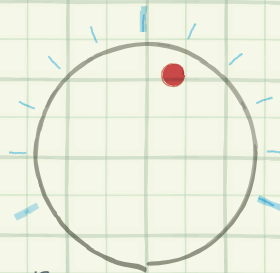## INDIVIDUAL LEARNING V GROUP & TEAM LEARNING
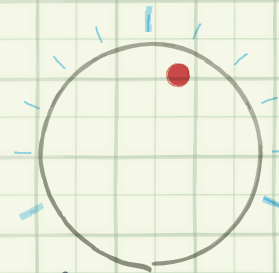
INTRAPERSONAL LEARNING V INTERPERSONAL LEARNING

Content

Format & Unfolding

Local/Social (Context)

Global (Context)

Purpose & Clarity

Experience, Context & Relevance

High Action

Low Action

HIGH ACTION/CHALLENGE V LOW ACTION (REFLECTION AND ANALYSIS)

WORKING WITH LEARNING ARCH METHODOLOGY?

The Learning Arches are primarily a method to design transparent, collaborative and experiential learning journeys or processes that maximise engagement, capacity, ambition, ownership, confidence, relevance and most importantly, dialogue between the learners and hosts, facilitators, instructors or teachers as stakeholders of the learning.

SET

Setting and building the learning team by sharing the frames, aligning expectations and making the **Call to adventure!** The journey of a lifetime.

X-LEVEL ARCHES

These do not exist in the curriculum and are used to connect & group LAs, blocks, sessions or modules through content, theme, mastery levels etc.

HOLD

Holding, hosting, facilitating and leading the learning experience and learning space is what happens in centre of the arch. It's the entire space or arc that is created between the set and the land.

MID ARCH INTERVAL

A check in, an opportunity to ask into progress, connection, alignment, satisfaction and understanding. It occurs as part of a setting or landing of a lower arch.

LAND

Land the arch in order to complete the phase of learning before starting the next arch. Allow the students to consolidate, reflect, analyse and feed forward their learning.

FIRST LANDING (1st)

The red line that lands in from the left represents what the students bring with them in terms of experience, knowledge, talent, passion, ability, competencies and positive attitudes.

STANDARD LANDING

To check in to see if the team understood the core knowledge and is ready to move on. **Done? Achieved?**

LOOPED LANDING

Is when you Land, evaluate and feed forward to build on learnings and experiences in order to re-apply what you know now. **Explore what the group would like more (+) or less of (-).**

WHAT ARE THE 5Cs

So we want to get people(students) onboard and set all the first arches to co-create a call to adventure to explore the learning journey (arches) you have designed.

1) Set the *context* - currently & make the connection with the people in the room! Speak to them, their future and the opportunity that awaits.

2) What needs to *change* (to be done or else) Be dramatic! Clarify what can be done with what is learned, understood, practiced, adapted and experienced.

3) What's your *concept*, your basic rough idea & frames for the learning journey (arches). Unfold the narrative of the adventure & learning journey a little. Share the ambition, purpose, , opportunity, learning styles, approach and deliverables. Not too much or you will lose them.

4) What's the *capacity* in the learning journey for autonomy, ownership, innovation, creativity, exploration, practice & challenge.

5) *Commitment!* Have you got it. Are they engaged and excited and ready to go! Bottom line the expectations, roles, rules, support, courage and openness required. Connect again with the participants and their resources/talent/experience & potential currently!

Inspired by the heroes journey - Joseph Campbell

On/Off
the Stage
The need for teacher leading/involvement/ facilitation should reduce over time if arches are well set.

Known : Skills, Knowledge, Methods, Models & Theory

Full Program Length

Year

Semester

X-Level

X-Level Module

Week

Day

Session

1st

Sc

The Experience?
The Space!

Mid-Arch Interval

Bootcamp

Holding the Arches Space

Teambuilding

Praxis #1
Increased challenge –
Learning by doing to create
a desire for methods & theory.

Set These Arches
Call to Adventure

Set it!

Land it!
Land, evaluate and
feed forward e.g. more/less of...

Unknown : Values, Mindsets, Attitudes & Competences

Mid-Arch
Interval

Semester 1

Mid-Arch
Interval

Holding the
Arches Space

X-Levels

Theory &
Methods

Mid-Arch
Interval

HS

AL

CD

KD

Act : Practice First →

Learn : Theory & Methods Taught First

← Adapt : Theory & Methods, Taught & Applied concurrently with Practice, Case, Assignment or Project →

Complexity, Challenge, Expectation, Ambition, Trust: Individually & as a Team

Lifelong Learning

3 years+

1 year

Praxis #2
Increased challenge –
Learning by doing to apply
methods & theory.

Time & Learning Period

Just Enough Before Practice

As the diagonal line of challenge, expectation and ambition increases during the program/learning journey we should revisit the most powerful and relevant SKAV. This will deepen the student's understanding of practice and application of the key skills and knowledge by unfolding more complex exercises and tasks throughout the program to maintain engagement and challenge. We need to break with the Academic cycle of check list learning in preparation for exams!

PRAXIS 1
Learning by doing to set the stage for why the methods and theory matter.

PRAXIS 2
There always needs to be another chance to apply learnings but with increased challenge.

ACTIVATE LITERATURE (AL)
How we activate the reading material (bring it alive) that accompanies a course or program.

CREATIVE DISTURBANCES (CD)
Increase creativity, sustain divergent thinking, innovation, inspiration, expectations, critical thinking & deliverables.

KNOWLEDGE DISTURBANCE (KD)
Small doses of knowledge, methods or theory delivered at a time where it is most relevant and useful.

HOTSPOT (HS)
A hotspot (HS) is an intervention designed to personally challenge and grow the students and the team/class to deal with diversity, assumptions, conflict, complexity etc. Also use Creative and Knowledge Disturbances and activate literature.

ABOVE THE HORIZONTAL
Known : all the skills, knowledge, methods, models and theory that supports the subject and learning purpose and methods.

BELOW THE HORIZONTAL
Unknown : the hidden curriculum : values, mindsets, attitudes and competencies:
How do you bring these alive in your program/course. Set and land from these and make sure to design activities that allow learners to grow in them.

HOW TO HOLD
MID ARCH INTERVALS

Mid arch intervals are marked moments at the peak of large arches that support a 'check in' to the learning & comprehension of the content.

Why wait to the end to see if people are where they should be, what's alive in them and if they are ready to continue. These intervals when brought down to the time-line usually correspond with the landing of other arches or even other mid arch intervals. This means that when you are landing a smaller arch, you may need to allocate time to land a MAI, and a chance to connect the micro, mesa & macro (e.g. day, module/x-level, semester) and test the temperature of well, everything!

So, you can see in the image to the right, that there are three examples of mid arch intervals and evaluations. They are indicated by a blue line in the middle of the arches. These are very important moments in the learning journey.

1) Represents an X-level MAI and a chance to check in half way through a block or arch that's purpose could be a boot camp, team building or the application of theory & methods to practice. Used early on, it can support the learning culture you are trying to create.

2) Represents a Semester MAI. Point out where you are and where you are going to your learners and land the MAI with the direct or nearest standard or looped landing moment below on the time

line. Like all MAIs and landing, you need to spend time on it. Here it falls perfectly between 2 arches, so when they are landed and set, it's also time to evaluate that block & semester.

3) Shows an X-level MAI. In this case, it could fall half way between fundamental and advanced knowledge, theory and practice or practice and theory so as to set the context for why the theory & methods are relevant. This could be the ideal time to host a one on one guidance session or learning group presentations or project updates.

MAI create a chance to see how people are doing and coping mid way. They are a planned and proactive intervention that support dialogue (through powerful questions) that lead to action.

Action here, could be to reconnect with the purpose, create clarity, revisit content, mirror the group or check for resonance & understanding of the SKAV. MAI allow us to share assumptions, change the energy, focus, learning styles and when to apply one of the four disturbances. *(see page 24)*

Action could also be to support deeper learning, more application, analysis & research. They can inform changes in the frames, time, priorities, complexity, expectations & deliverables.

*"Hold the learning spaces,
explore the roles,
options and play
with disturbances."*

Mid-Arch
Interval

Mid-Arch
Interval

Mid-Arch
Interval

1   2   3
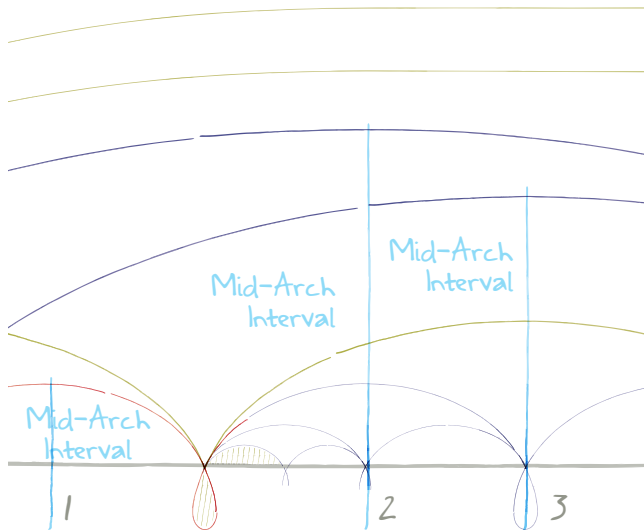
NOTE

Use MAIs to STOP! CHECK IN, and ACT. Don't continue down unproductive roads or learning plans. Ask the right questions at the right time and always remember what you are working with, for and towards. What are you in service of and stay curious. Reconnect with the purpose, the rules and remind all what they said yes & committed to? What do they need to lean-in, to let go of in order to participate and be present.

ADVICE FOR MID ARCH INTERVALS

- Trust in the arches you designed and allow for continuous alignment and assessment.
- Revisit the learning journey (how's the story unfolding individually and as a team?)
- Ask for feedback, what does the group need?
- Timeout! And adapt based on serving the students needs and interests. Are we on track? What needs to happen?
- Reconnect with the purpose, agendas, call to adventure and boost energy /focus and engagement.
- Use the learning arches to show the MAI, to highlight before and after and ask into what is and is not working?
- Listen and keep the focus, stay open and empathic. From a meta level, share what you hear and mirror the groups behaviour to them and the effect of their actions, good & bad.
- Be transparent and share your thoughts, ideas, next steps and consequences.
- Invite the students to practice facilitating the MAI in pairs.
- Communicate clearly and with intent.
- Resistance and frustration give energy. Ask into it and explore the underlying needs and assumptions. Then clarify, consult or co create a solution. Be courageous and lead by example.
- Be authentic, open and act on intuition & experience
- Engage the entire group and give space to all voices.
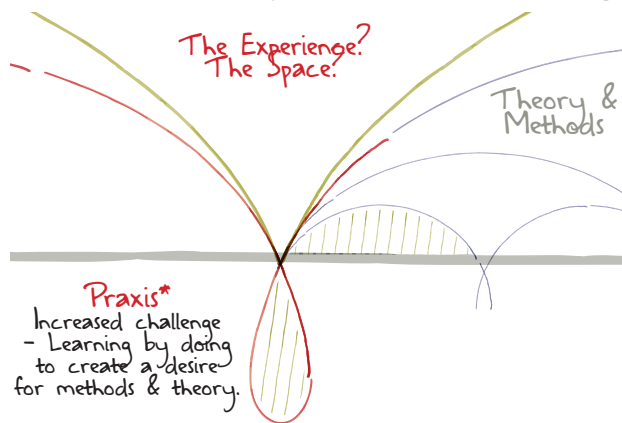- Be clear on next steps, next arches and what you will do with the feedback.

POWERFUL QUESTIONS TO SUPPORT SET, HOLD AND LAND

- *What if?*
- *What is important to you?*
- *Why is this important?*
- *Where do you want to go?*
- *What is needed right now?*
- *Can we all work with that?*
- *What more do you need?*
- *How can this group help you?*
- *What is stopping you?*

HOW TO LAND LEARNING ARCHES

Execution, measurement, analyses, reflection, assessment & feed-forward it all!

Landing a Learning Arch is a key moment in any learning process. It's the time when, if you have designed and facilitated correctly, the students are asking for more and less of content, experience, reflection, application etc. But generally, it's a time to land, relax look back and feed forward. A time to assess and evaluate not just on a skills and knowledge level as is the norm in academia, but equally on an attitudinal and mindset level. Allow the students to feed forward their learning, get on the same page, explore what they want to learn more of or dig deeper into for the remaining arches.

Or simply, make connections to help understand the importance of what they have just acquired and learned in relation to the master arch and over all purpose/goal or vision of the program. To reconnect with the bigger purpose.

Always, land the arch in order to complete the phase of learning before starting the next arch. We land, and let everyone catch their breath. The longer the arch, the longer the time we take to land. It's a time when we come back as a team or class of students and learners to make explicit the success and failures when applying a particular skillset, method or theory.

DESIRED OUTCOMES

- Re-connect as a team/class and to the content and learning journey.
- We want to land. To complete a learning arch and end well. As a result, learning experiences are better completed.
- Time to evaluate, assess, feed-forward and celebrate achievements and success.
- Check deliverables and learning outcomes. Clarify expectations towards success and measurement.

- Evaluate and reveal the team's learning and best advice from sharing the individual and group learning while bringing closure to the group process and to get ready for setting the next arch. (use powerful questions to support the next arch where possible).
- When landing, check for mid-arch intervals (MAI) *(page 16)*
- Students know exactly where they are in the learning journey!

- A clear exit and ending.
- Land with a bang and high energy, celebrate and check out! It supports the next set and carries momentum.
- Land with group needs, success criteria, what they would like more and less of in terms of skills, knowledge, attitudes, practice, clarity, pace and theory.
- Be clear on next steps, next big / small arches, next challenge and how this arch related to it.

- Feed forward based on self and professional evaluation.
- Remember to state that you will try to carry forward ideas and suggestions as well as applying to the next time you run this block/module etc.
- Create clear frames, purpose & a process to evaluate, reflect & share.
- Engage entire group and all voices in the landing and suggestions for change and solutions.

HOW WILL YOU CREATE THE CONTEXT FOR WHY CONTENT & EXPERIENCE ARE WORTH LANDING?

Act

PRACTICE FIRST in order to see what they know already and meet them where they are at! After the 1st practice or experience, reflect on what they need to know more of in order to achieve more success & learning in the 2nd practice. *(see centre fold)*

Learn

THEORY & METHODS (T&M) are taught first but in doses. Start with the fundamentals. How little T&M are enough to 'try and apply'. Then, set or invite the students to find a client and (complex) project or case to solve. Commit to solving it, but not starting the project period until after they have learned more about how to do it, maybe some weeks later.

Adapt

T&M APPLIED & RUN CONCURRENTLY when applying to a chosen project, brief or case real time. So, choose the groups and the projects before the T&M start. Then, as they learn, the students apply immediately to that project concurrently in groups before the project period even starts and while the expert is in the room.

CONSIDER WHEN LANDING ANY ARCH

- Evaluating on changes made at mid arch evaluation / intervention
- Using the LAs as a visual guide to support a process for recap, debrief, feedback and evaluation.(maybe using candles or post-its to highlight learning, breakthrough, challenge and recommendations.
- How to best share results, findings, learning, exams and outcomes with the entire class / school.
- Ask yourself & participants what SKAV and mindsets are being learned, applied and embodied, that they would like to unfold more of moving forward.
- Continuously learn, apply & implement. Stay in service of the participants.
- Revisit your programs intention, desired outcomes, agenda, roles & rules and time or IDOART*. Also, reconnect with the PRE-JECT* or big arch setting to re-align expectations, content and evaluate accordingly.

  * Primary tools used by the Kaospilot.

ADVICE FOR LANDING

- Provide enough time and purpose to land well, especially if it has been a long arch, module or semester.
- Re-connect with learning objectives for the arch and measure how they have been understood.
- The students have just shared a learning experience and /or a method or process, so land it well with an assessment that measures SKAV on individual growth, group and team level.
- Land the big / small agenda / the adventure!?
- Where have we gone? What have we done?
- Land with a bang and high energy / celebrate.
- Land with an evaluation of SKAV and what does the team need more and less of. Feed it forward to the next program or arch and share what will happen next.
- Use LAs to capture personal & professional feedback (appreciatively). Build on what has be done well by the teacher and the students in their group or team that has been in service of the learning, the arch's purpose or outcomes and what can be improved moving forward?
- Standard or looped landing? What to take forward - advice, requests and changes for what's coming fx: re-adjust the pedagogical compass and learning styles. *(see page 14)*
- Evaluate mid arch reflections, changes and decisions, where they made, did they work?
- Engage the entire team and give space to all voices.
- Land on the attitudinal development, especially if the participants had chosen a personal focus, challenge or stretch.

SUMMATIVE ASSESSMENT (LAND)

*The goal of summative assessment is to evaluate student learning at the end of an instructional unit by comparing it against some standard or benchmark. **Wikipedia***

Examples of summative assessments include: a mid-arch or final exams, final projects & well framed reflection and evaluation to feed-forward learning (looped landings) and feedback to the learning journey. The purpose is not only to show the students subject & knowledge competencies, but also their social, change & most importantly their action competence and their ability to create sustainable impact & value from those actions. These Individual and/or collaborative group task based learnings (that attract a mark) are then shared to the entire TEAM.

LEARNING ARCHES
LEVELS AND TYPES OF LANDING

Generally speaking, landing is a reflective action and it works on 2 levels ;

1) Allowing the students to self and peer assess their performance, the process, the methods and the delivery of content etc.

2) Refers to the theory and encourages the students to analyse what they know and what they need to know more of. To see if what was expected to be learned by that point, has been? The key is we do not move on until we have all the students at a desired level of understanding and clarity.

**The 2 main types of landing;**

Standard landing

To check in to see if the teams core knowledge base is there and is ready to move on. It can also be a test or informal check out that can focus on any question set by the teacher/facilitator to inquire into this readiness. Fx: what is your biggest take away or learning from today, this week, this module and why?
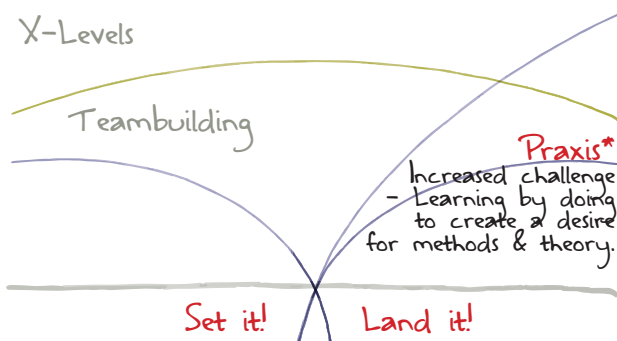
Are we ALL ready to move on, what do we need (to revisit) in order to move on?

Looped landing

When you Land, evaluate and feed forward, Fx: explore what the group would like more or less of. The LAs below, show a core learning method used at the KP. We always create a context for why the theory and methods are relevant and powerful.
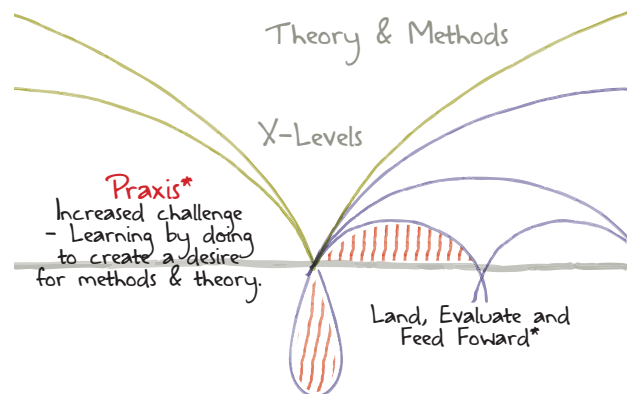
So, when we land after a purposely designed practical experience to create the need, desire and context for unfolding the theory and methods, we frame the evaluation so that the students (who should get a second chance to practice) explore what they experienced both good and bad. This creates a clear list of SKAV that they would like to learn and explore before being given a chance to practice again. This 2nd practice, should be more challenging and complex on a personal and professional level.

*"By three methods we
may learn wisdom:
First, by reflection, which is noblest;
Second, by imitation, which is
easiest; and third, by experience,
which is the bitterest"*
Confucius

If done correctly the students will ask for what they need, which is what is planned to come in the next arches, based on learning objectives from the curriculum. The difference is they are asking for it, with an already established common experience, language and working understanding of the skillset, knowledge or purpose of the module or course.

NOTE

- Remember to land the Pre-Course Arch, as part of setting your first arches at the beginning of your course (or after any sugnificat holiday or break) This may represent what the students bring with them and what you can measure or test for, such as ambition, experience, knowledge, talent, problem solving skills, creativity, interest and ability etc. Meet them where they are at! And then adjust your LAs, content and ambition to their level.
- At the beginning of the course / program you created and shared a 'Call to adventure' for the learning journey, how can you best land this adventure?
- It's important to remember when landing learning arches at the end of a full program that has had a strong practical, alternative or emotional learning style, that we are aware of the learning style or academic reality that the students will return to. Therefore, we must set the arch for them for dealing with that reality. There is always another arch starting!

VERY IMPORTANT TO REMEMBER!

When visualizing looped landings, the arch loops going under the time line represent 2 choices.

1) Real time setting & landing in class.
Even though we visualise the loop below the line, we need to plan time for the landing and the setting on the learning timeline itself as an arch, as shown with the red diagonal lines in the diagram. As it's a looped landing (LL), we might:

i) land and set for the next arch at the landing of an arch, and then set again, but only focusing on what to take forward/focus on.

ii) land and use the 'time' before setting the next arch for student reflection, distance from the learning, preparation for what's next and maybe to redesign/adjust the LAs. Then land and set that 'time' ((between land & set) at the beginning of the arch.

iii) land and set at the beginning of the next arch. Try a 2 part landing, first a standard landing and then a loop landing when you set the next arch and make the connection/link. *(all LL are supported by well framed Qs and an evaluation to allow the students to harvest learnings that should set the stage for the next arches purpose, content and learning style).*

2) Landing and reflection outside the classroom.
If you want the landing and reflection to take place outside the classroom, then set the evaluation or reflection frames for the students to discuss and create best advice or practice off-site or online. If you do this, you **must** share the results with the team and then land and connect them to the next arch as part of that arches setting.

ADVICE FOR HOW TO UNFOLD/UNPACK AND FORMAT THE CONTENT

Sustain engagement through autonomy, risk, relevance & action.

- Design for a future capacity in the students that does not exist yet, but will with the correct learning journey design, facilitation and environment.
- Unpack the content and group the learning periods using X-levels and support with progressively challenging experiences and designed disturbances.
- Share perspectives and clarity around the LAs, what is new & experimental v tried and tested and why? Set for the emerging context, consequences for not changing & benefits there of.
- Create great transitions between arches, landing, reconnecting and boosting the next arch!

- Structure the LAs to introduce autonomy, complexity & self-direction. Use the LAs to share & frame how guidance sessions will be used to support the students individually as well as in learning and project groups.
- Consider that one core powerful (practical) experience of SKAV may be enough to reflect and maximise learning across individual, group & team if landed properly. *(see page 20)*
- Use the LAs as the learning frames, the scaffolding to allow for flexibility, adaptability and to create student ownership.

Here is the most basic structure & components of a learning arch. All are time specific in this example.

Setting X-Levels

X LEVELS

X-levels do not exist in traditional curricula. Why, because a curriculum is an impersonal and linear document. There is very little focus on the cross pollination of content, learning styles, methods, theory, and practice. They do not describe the lateral exploration or the embodiment of SKAV.

LAs bring alive the curriculum and turn it into a learning journey, creating new spaces for emerging patterns of content, relationships, order, progression, alignment and understanding. These new spaces are called x-levels. They exist between the regular hierarchical blocks of education design, lectures & days, days & weeks, weeks and modules, modules and semesters and only emerge after these are drawn and populated with SKAV. When we step back, we begin to see the emergence of new constellations and ideas for how to group arches on this x-level. This can clarify why and how the smaller arches are relevant and interconnected on creative and deeper levels. We group the arches and create new learning spaces on this x-level, that can expand time, opportunity, ambition, content, diversity of learning styles and experiences (p 15). These are X-level arches.

X-LEVEL ARCHES

Arches that group multiple lower level arches. They connect and bridge smaller sessions, days, weeks and module arches to create groups and sub groups, themes & new connections between SKAV. They support the creative formatting of content, ambition and time. They allow you and the students to better unfold and connect content, resources and the learning potential and increase clarity, transparency, relevance, exposure and relationships of content and meaning.

XLAs are ideal if you are working with courses that may only have one to two sessions a week. You can group these as multiple sessions to span weeks, fx: practice, knowledge, project (or research) and presentation. You can draw arches between each session so as to maximise and utilise the time in between them for research, preparation, reading and interest. But remember, you will need to set and land them as part of your already short sessions, but its worth it.

NOTES

We continuously set, hold and land the Learning Arches to ensure that the learners are clear and ready to move on before we set a new arch.

You can explain to your participants at any time; where, why, how and what they are doing within the learning journey. We continuously check in to the learning by asking the students when we:

SET
- Why are we here? What are we going to do as a team - what will we deliver?
- How do we want to work together? (Desired mindset for students and participants).
- What can I (as an individual) offer? (Use your full experience).
- What are our expectations?
- Are we aligned? Do we fully understand & are we willing to TRY it?

HOLD
- What's alive in the room right now?
- What is giving and taking away energy from us in order to do the work?
- Where do you want to go from here?
- What could we do more or less of to support the group and team's learning & success?
- What do you/we need to let go of for the remainder of the arch / program?
- What are you discovering about yourself / content that you would love more time to explore?

LAND
- Are we all ready to move on, if not what do we/you need to move on?
- What would we like more / less of next time, or that we can carry forward and address later - concerns, content, needs.
- How could we practice or apply what we are learning or what we have learned so far and get ideas form the groups and team?

LEARNING ARCHES
DISTURBANCES, CONDITIONS, CONTENT, CRITERIA & CULTURE

Creative Disturbance

A Creative disturbance increases creativity, sustains or prolongs divergent thinking, innovation, inspiration, expectations, critical thinking, deliverables and can support convergent action. It can reconnect a group or team with ambition and potential of the work and outcomes, to excel and innovate! Strategically, they can be used to challenge solutions, methods, postpone convergence, boost energy and ambition. Consider changing of location, context and place. Get people moving, shifting their perspective and seeking inspiration through urban safaris, walk and talks, emotional and social mapping, recording and inspiration galleries. If the level of creativity or output is not going in the right direction or they are converging too early with poor ideas, concepts or solutions, intervene with tools, methods and inspiration to force them to diverge again and go back to the drawing board if required. A disturbance could shift the exercise frames such as time, deliverables & challenge to provoke the design process and connect with a more ambitious result.

Knowledge Disturbance

A Knowledge disturbance or 'just in time' knowledge is a small dose of knowledge, methods or theory delivered at a time where it is most relevant and useful. Rather than fill students up with knowledge and theory in one seating, we recommend to explore 'how little is enough?' to get the students going or applying their knowledge sooner rather than later. Then, as their knowledge and comprehension grow based on application, increased challenge or change in context, at an appropriate time, deliver another dose of theory or knowledge, methods or models. This is a great way to support the unpacking of knowledge. As with all these disturbances, have them prepared and ready to share, when you think the time is right, based on energy, capacity, at MAI or landing, if the students ask for more theory, understanding and analysis, before setting the next arch.

Hotspot Disturbance

A hotspot is an activity, intervention or process designed to personally challenge and grow the students & team to deal with diversity, assumptions, conflict, complexity, etc. It can create a space for students to act and take leadership with support and guidance from the teacher / facilitator. An example could be to experiment with the frames for setting & picking the project or work groups in order to create a disturbance, conflict, high diversity, challenge in the project picking process to reveal real emotions and bias towards working with certain peers due to their poor work ethic for example.

If done correctly, these interventions, which occur by design, can lead to very powerful landings with peer 2 pear breakthroughs through feedback and individuals behaviour being mirrored by the group. Hotspots do not appear on the leaning arches shown to students, it's the only thing that is not revealed. There are 2 very important rules that can never be broken, 1) there always has to be a purpose for doing one and 2) it must be landed well and authentically!

There are some assessment types that support setting, holding and landing. This can often be the toughest challenge for any educator within the academic system. So, relate to these and adjust while you explore how to develop your own measures of success and performance across skills, knowledge, attitudes and values?

Activate (The Literature)

Refers to how we activate the reading material (bring-it-alive) that accompanies a course or program. It is so important if reading or tasks are completed outside the classroom, that the students get the chance to explore, apply, practice, discuss and build on the reading in order to get a wider and more nuanced understanding of the text and content. AL disturbances can be built into setting or pre-setting arches to set the content before the context, where they discuss and explore through dialogue, debate, presentation and of course always, application.

HOLDING THE SPACE

When holding the space, consider applying pre-designed and prepared interventions or high-action activities to invigorate learning, creative & personal challenge, connection and energy.

Check in and pause, offering low action to explore & analyse content and knowledge gaps (activate literature or Knowledge disturbances), or to offer reflection on personal growth (through self reflection & peer-2-peer feedback).

Always ask into what's alive, what's needed and explore possibilities that can challenge the students on individual, group and team levels in service of the best learning at that time and in relation to the bigger purpose. We continuously unpack the content and develop the learning journey while monitoring the level of engagement, ambition, autonomy and intervention.

Meet them where they are at and based on their capacity at that time, apply disturbances. Sense if the students are closed to input, receiving or feeling active & creative. Adjust accordingly with the disturbance that will move them into the right frame of mind for the lesson or arch.

Fx: Move them from being closed (tired) and not receiving to being able to receive content by offering a creative disturbance or postponing the content to a later AL disturbance.

ASSESSMENT TYPES

AUTHENTIC ASSESSMENT * (ALL)

'The measurement of "intellectual accomplishments that are worthwhile, significant, and meaningful, as contrasted to multiple choice standardized tests'. Wikipedia.

Authentic assessment can be devised by the teacher, and in collaboration with the students by engaging/activating the student's voice. At the Kaospilot we refer to this as the activating the Hidden Curriculum.

In order for AA to work, we must provide students with situational contexts and challenges that occur in the real-world which require them to apply their relevant skills, competencies and knowledge to grow their values, character, mindset & attitudes. Then we assess on an individual, group and team performance level after each arch to share personal and professional learnings, success and failures bringing alive the hidden curriculums attitudes, competencies, mindsets and values.

DIAGNOSTIC ASSESSMENT (SET)

A primary type of assessment, which is given at the beginning of the course or the beginning of a unit of study to assess the skills, abilities, interests, experiences, levels of achievement or potential gaps & difficulties of an individual student or a whole class. Its used to establish a starting point or baseline OR informal measurements (e.g. observation, discussions, questioning, boot camps, projects, research & workshops) Wikipedia.

When we set the arches, this assessment is used to collect data on what students already know about the topic or what we call to, 'meet them where they are at'. We then adjust & adapt accordingly - and are over prepared & under-structured in our delivery.

FORMATIVE ASSESSMENT (HOLD)

'Given throughout the learning process, formative assessments seek to determine how students are progressing through a certain learning goal/arch or journey.' Wikipedia

Through Individual, group and team performance, observation and guidance during the learning process, based on increasing challenges and changing contexts we create a concurrent record of the students understanding, achievement & engagement. We always ask, WHAT ARE WE LEARNING & DISCOVERING ABOUT THE CONTENT & OURSELVES? What do they know, understand and can do? It is supported by just in time knowledge, disturbances, meaningful feedback, intervention & guidance and should inform learning journey adjustments.

SUMMATIVE ASSESSMENT (LAND)

'The goal of summative assessment is to evaluate student learning at the end of an instructional unit by comparing it against some standard or benchmark.' Wikipedia

Examples of summative assessments include: a mid-arch or final exams, final projects & well framed reflection and evaluation to feed-forward learning (looped landings) and feedback to the learning journey. The purpose is not only to show the students subject & knowledge competencies, but also their social, change & most importantly their action competence and their ability to create sustainable impact & value from those actions. These Individual and/or collaborative group task based learnings (that attract a mark) are then shared to the entire TEAM.

WHAT OUR PRACTITIONERS, PARTNERS & EARLY ADAPTORS SAY

The teachers, facilitators, trainers and learning designers who are applying the Learning Arches, strongly believe in its effective, simple and visual representation of curricula brought to life as a learning journey. They believe that LAs support personalised and transparent learning through individual, group and team-based challenges and anchor authentically, the attitudes and mindsets that are so desperately sought for by social leadership and by the labour markets across the world.

The learning arches represent a learning cycle, which can be the 3 years of a degree, a semester, a month, a week. In each arch there needs to be a start, a mid point where there should be some kind of assessment of the module and a landing or ending point, that offers the students or participants an end and a closure to a cycle.

In my view this landing is so important in each stage, it means a change in many aspects of the learning space. We should devote celebration and time such a closure implies. What changes have been achieved, where are we in relation to the starting point, what has changed and what is still to change, etc.

Caroline Kuhn
Professor at Pontifícia, Universidade Católica
do Rio Grande do Sul, Brazil

The Learning Arches forced us to re-think our curriculum and thereby our existing mindset. It is a long-term process designing a new integrative and less complex curriculum, but using the Learning Arches in its total context (not only as a design technique) proves to be very powerful in making a fundamental change, in designing education that is focused at the students, and allowing teachers to (re)discover their passion and strength in their teaching profession.

The Learning Arches helped us find and understand the connections within (and between) the semesters and the program as a whole. Placing the identified SKAV, and ensuring a well thought through build up using the set...hold...land principles, proved to be very helpful to come up with

integrative assignments which allow students to experience a certain topic with the necessary depth and support…. to enrich our session, putting students in the lead and facilitating them to create their own learning path.

Jochem Jansen & Theo de Jong Stenden
Lecturers at Stenden University
Groningen, Netherlands

The Learning Arch method has been really useful in developing our approach to curriculum development. For our 'curriculum hackathons' (intensive curriculum development workshops), thinking in terms of Learning Arches has enabled us to map out and envisage a complex, multi-layered process. Moreover, the principle of 'starting' and 'landing' the arches has resonated with us on a deep level - the need to ensure that one Learning Arch is complete before another is essential to the curriculum development and learning process.

Polly Akhurst
Co-Executive Director, Sky School, UK

Learning Arches - the MacGyver Tool Kit and-Mindset. The uniqueness of the Learning arch method cannot be doubted by anyone. But nevertheless, I would like to highlight some personal experiences that strongly influenced my mindset.

In the academic context, text-based descriptions are one of the biggest obstacles to the understanding of the content and its proportion and relationship to each other. For me, the greatest value of this tool, is its visuality. It provides me with the opportunity to view the entire curriculum as a

Deliver education that is authentic and opportunistic in nature, experimental and real in praxis. All else is rudimentary.

whole. It's like looking at someone's biography on a timeline. The Typical case with professors (and students) is that they do not have information about what happens before their subject and what happens afterwards. Through learning arches, they will not only know what they are learning but understand why they are learning it and why in such an order. I've got a passionate interest: is there any possible situation where the Learning Arches are not suitable?

Merike Rehepapp
Associate Professor at Estonian Academy of Arts, Product Designer and Trainer, Estonia

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"What is a Learning Arch? It's an action-packed sequence of "learning by doing;" a series of challenges, launched with a bit of mystery; linked by compelling narrative; stuffed full of real-world puzzles, challenges and dilemmas, landing with a public exhibition and followed by reflection and "lessons learned. Semesters, textbooks and standardized tests are no match for Learning Arches, real world challenges and lessons learned, because a soulless bureaucracy is no substitute for a fulfilling Hero's Journey"

Jeff Sefander
Founder of the Acton Academy
Austin, Texas. USA

Learning Arches is a powerful visual management tool that has changed the way I tackle my learning design. By literally 'seeing' the movement of the planned activities, I can see what's missing or what I should change. By having the complete view of

the program, whether it's a half-day or a full 6-day program, I can adjust the flow, the settings and landings, reflecting periods or I can even test what it would 'look' like and 'feel' like if I changed some activities. The Learning Arches tool is my drawing board, my prototyping space and my facilitation support tool all in one. I'm a huge fan!

Danièle Bienvenue
Founder Management Savvy,
Montréal, Canada

"The stage is set, the curtain rises, we are ready to begin…" ~ Sherlock BBC 2015

With Learning Arches, Kaospilot has created one of the most progressive visual modelling tools for robust curriculum development. Its simple structure belies its inherent ability to assure continuity and consistency in designing dynamic coursework; from individual courses to complete multi-year curricula. The design architecture provides the development team with the curriculum equivalent of Russian nesting dolls (matryoshka) on a single whiteboard. Impressed!

Eric Anthony Spieth
Innovation and Entrepreneurship
Plymouth State University, USA

To help W students gain visibility, we are using the Kaospilot Learning Arch method - which is really efficient. Each arch begins with the launch of a session. We inform our students about the session's main goal, its program, as well as the skills they need to acquire. At the end of a session, there is systematically a 'landing'. The teaching

staff and teachers open up a dialogue with students to put words on what they learnt and managed to do during a session, but also what they can do better next time. This feedback is key, as it allows both students and teachers to question themselves. It is also a great moment of cohesion for the teams.

Sandrine Chicaud
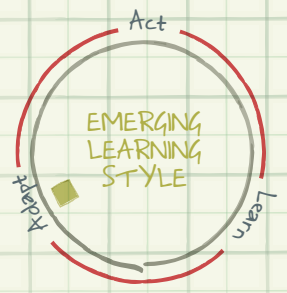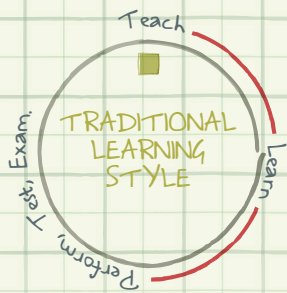Responsable des Etudes, Ecole W
Paris, France

The Learning Arch method is many things. For me its greatest strength is the metaphor it provides. It is the arch and the learning space it encompasses that shape the way we think and talk about education, about learning and teaching.

Any pedagogy will tell you about the need to establish the goal you want to attain for your students and assess clearly where it is you are starting from. The Learning Arch, however, brings the message home much more forcefully. It also identifies the space you need to fill, as it were, in order to get there. The visual image is clear and it provides a frame of reference we use for discussions in the teams, and with our students. It is a matter of experimenting, trying out various alternatives and by talking about these. Overtime we also established particular patterns that fit with our educational approach and the context in which we are working.
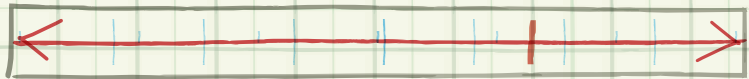
Dr. V. Wiegel
Co-Founder of New Engineers
Professor of Lean at the
HAN University of Applied Sciences,
Netherlands
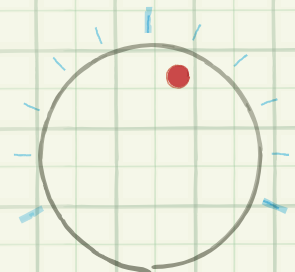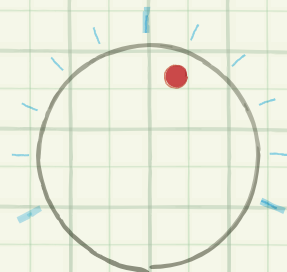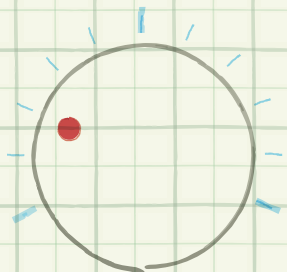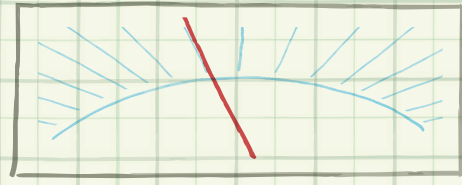
Design & fine tune your own learning styles

TRADITIONAL LEARNING STYLE
Teach · Learn · Perform, Tests, Exam.

KOLB EXPERIENTIAL LEARNING STYLE
Experience · Reflect · Learn · Apply

EMERGING LEARNING STYLE
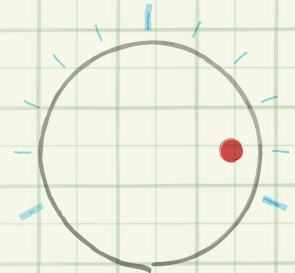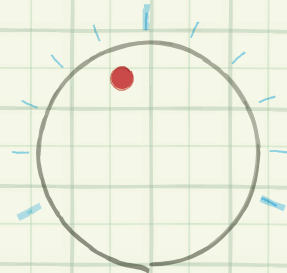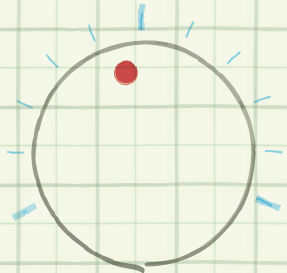Act · Learn · Adapt

Taking Energy Leads To More **Frustration** ⟵——————⟶ Giving Energy Leads To Personal **Breakthrough**

THINGS TO THINK ABOUT BEFORE YOU INTERVENE
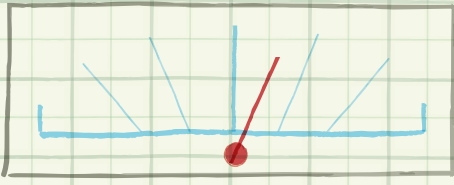
Notes & Ideas

'More and more Students (People) seek Quality, Experience and Spirit!'

A culture of possibility, belief and belonging. An alignment around a bigger purpose and hope. Shining eyes. Each student (and individual) is entitled to this.

So as an educator, teacher, facilitator or student, Claim it! Claim the change, innovate, step up, lean in and take a risk. Failure is a part of learning, so embrace and lead by example!

Be tough but patient, play the long game and co-create with the stakeholders and invite all into the process. But remember, change is not for everyone.

'Meet people where they are at'

Through setting, holding and landing in order the 7Cs;
1. Connection, 2. Conditions, 3. Context, 4. Content, 5. Craft, 6. Character, 7. Confidence

Unfold the learning, ownership, craft, talent, genius & sustain the flow, transparency, potential and impact from this day forth.

Make it valuable. If it doesn't create value, change, adapt or Stop!
Never Undermine Your Ethics. Strive for What You Stand For.

Independence, do you have it?
Stay Independent from fake trends and pseudo ideology and true to your Passion & Genius.

You Are On The Right Track! Stay true to your calling and the social and professional context from which your PURPOSE and LEARNING EDGE emerge and invite others for support to change learning forever. Share & Inspire others, but don't shape culture alone!'', **Simon Kavanagh**

KAOSPILOT