

Active Learning Portfolio

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“Be the change you wish to see in the world.” —*Anonymous*

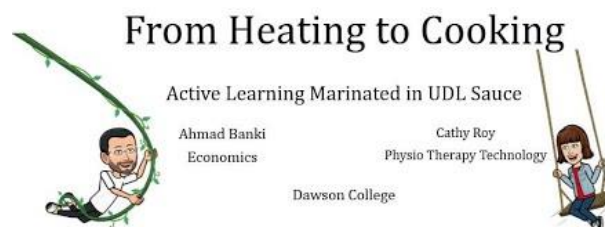
This portfolio addresses the following research questions:

1. How can the principles of active learning and universal design for learning be combined for a more comprehensive and inclusive pedagogical approach?
2. In the wake of the Corona pandemic, how can active learning be redefined in a way that is applicable to both in-person and distant education?
3. How can instructors facilitate the ascent of learners to the higher levels of Bloom’s taxonomy through a revision of their activities, assessments and grading?

Several parts and aspects of this portfolio are owed to assistance from Cathy Roy. I drew a lot of support and inspiration from her throughout my DALC journey. Nevertheless, I bear full responsibility for any mistakes or shortcomings in my portfolio.

Autonomy & Inclusiveness

While active learning is student-centred, its design can be either top-down or bottom-up. In a top-down design, the teacher dictates how the students should engage with the material and acquire the competencies. This often comes at the expense of inclusiveness, which is centrepiece of [universal design for learning](#) (UDL). A bottom-up design, on the other hand, is student-centred to a fuller extent, in that it recognizes a diverse range of methods by which students engage and learn. This bridge between UDL and active learning is covered in the following [video](#), in collaboration with Cathy Roy:



While the cooking of competencies is by nature an asynchronous process, this does not reduce from the importance of synchronous instruction, especially in disciplines with a performance component such as technical programs, arts, laboratory experiments, and certain levels of languages. In fact, much of the literature which emphasise the impact of teamwork and classroom design on learning have their provenance in science labs, where these factors can make a significant difference. However, we must

still ascertain that the heated labs indeed transfer into cooking outside the synchronous environment. Moreover, generalizing this beyond its particular context would be a fallacy.

Three words summarize how my life has turned:
First I was raw, then cooked, then burned.
(Rumi)

Engagement

Active learning and student engagement are often used interchangeably. Such inaccurate and unprofessional use of language can create confusion, especially for those who are new to active learning. Here is an elegant hypothetical conversation between Saint-Exupery (SE) and the little prince (LP) to clarify some of the terminology:

SE: My little prince, take this valuable advice from me: much of people's disagreements are due to unclear definitions. If the two sides of the argument were to first clarify what they mean by each term, they would realize that the other side isn't really their *opponent*. They would realize that they have a lot more in agreement than they thought. Remember this from me, because it's a very useful lesson for life my dear. Whenever you encounter someone making a distasteful statement, suspend your judgment until you investigate their definitions and assumptions. You'll find that *assuming* those definitions and assumptions, their conclusions are rather valid. This will spare you of a lot of headache and drama. It will also change your entire orientation toward arguments: instead of trying to prove the other side wrong, your approach will be to combine their view and yours for a more comprehensive view.

LP: Wow. None of the other grown-ups told me that. Now, let's put that into practice and clarify some of our definitions. First off, if it's not active learning, then what is it?

SE: Passive learning.

LP: Isn't that an oxymoron? If it is passive, can it still be "learning"?

SE: There are multiple levels and forms of learning. One's learning may be at a recall level.

LP: How about "engagement": can learning take place without engagement?

SE: Yes and no. If you mean a total lack of engagement, then no. But engagement too comes in different forms and levels. One learner may be engaged with memorizing definitions and dates, while another may be engaged in creating an original expression of a lesson.

LP: So should we stop using the word "engagement" in discussions on education?

SE: Pretty much.

LP: Why?

SE: Because it doesn't add anything to the meaning. Besides, the word "engagement" is often used with a positive connotation, and that itself is a fallacy: using a loaded term—whether positive or negative—and then jumping to a conclusion based on one's word choice.

LP: Are there any alternatives?

SE: We must redefine "engagement." Currently it is too amorphous and indeterminate. We should specify what we exactly mean. For instance, "creative engagement," "peer engagement," "aesthetic engagement," "long-term engagement."

LP: I see. Now, can we say that "active learning" and "competency-based learning" overlap?

SE: No.

LP: Why not?

SE: You know, you're asking too many questions man. You remind me of my five-year-old.

LP: *C'est moi, le petit prince!*

SE: *Exactement.*

LP: Well, you say that your role as a teacher is not to fill the students' minds with answers, but to train their minds to ask meaningful questions. Right? So here we go!

SE: Yeah, you're right. Content- and competency-based learnings pertain to the *objectives*. If our central objective in education is the transmission or acquisition of facts, then that is content-based learning. However, the way these facts are transmitted or acquired can still be active.

LP: How about the other way around? Can competency-based learning be passive?

SE: Duh! Just look around buddy. It's all over you. Whether it's effective or not is another issue. But yes, one's approach to the transmission or acquisition of competencies can be relatively passive, which is when the teacher is in the spotlight, speaking, asking and demonstrating. The objective is to foster competencies in the students, but the vehicle used for it is not active learning.

LP: Can you summarize?

SE: Can *you* summarize?

LP: Learning and engagement have a broad range of applications. They are practically meaningless without further specification. Competency-based learning is a value system, where knowing facts is not held in the highest esteem. Once we adopt this goal, active learning pops up as a way of making our means compatible with the end that we seek.

SE: Wow, that's pretty good for an inquisitive five-year-old.

LP: Shush! It's called active learning, and you're no longer in the spotlight.



Transfer of Learning

If our students were to retake our final exam six months after finishing our course, would they pass? How much do we retain of the content that we learnt during our education? Is the purpose of education only to score points and then move on, without adding anything to the learner? While these profound questions can be disheartening they bring into relief the distinction between content- and competency-based learning. The purpose of education is not a transfer of content, but a transformation of structure. We want our students to assimilate the competencies and transcend them beyond the classroom to their everyday life, as applicable to them in their own unique and authentic way. This lofty goal is certainly possible if we train our students for it. We need to model it for them in our courses, and give them activities which prompt them to apply the course material to a wider context.

The movie [Free Willy](#) (1993) can provide an insightful model for the transfer of learning. Our students are like Willy: initially in a closed protected space, to acquire certain skills. But they're not supposed to stay there forever. The objective is to make that jump into the ocean. Now, to be fair, this is not so dramatic. They would rather go through a series of nested pools, where each new pool is larger and deeper than the last, with a wider range of marine life to be exposed to and contend with. We teachers are like Jesse: our job is to teach Willy how to find its way from the pond to the sea. What gets transferred is neither content knowledge, nor its application, but the learners themselves. The result of education is neither separate nor separable from the learner. Transfer is a successful transition of the learner to more expansive contexts which resemble real life ever more. In this sense, it can be thought of as a form of transformation. Thus the concept of "graduation": students graduating from school are like Willy breaking out of the marina. And this is not limited to students in school, for life in general is an endless series of transfers from one pool to another, until the final liberation.

Free the Whale Without

For a limited time an aquarium may hold
A whale for training, as a form of scaffold.
Where does Willy belong: the ocean or the pool?
The whale is a pupil, and the pool is a school.
The walls of marina provide protection;
But at some point arrives the time of ejection.
The purpose is to jump from the pond to the sea;
That's the job of Jesse: setting him free.
And once he is there, no claims remain;
It's the end of the pupil and teacher's campaign.
It's time to let go: for Jesse, to return,
And for Willy to move on; *that's* how we learn.
A scaffold, for too long, turns into a cage;
Cut short your speech even though you're a sage.
In the aquarium there's food, shelter and peace,
But only to practice for the day of release.
Life is an endless continuum of leaps,
From one pool to another, from the shallow to deep.
Transferring to a pond bigger than the last,
Which itself is a cast that ought to be cast.

Preparing ourselves for the final liberation
From the school of life: a gradual graduation.



Two-Stage Assessments vs. Gradeless Learning

Two-stage assessments (also called collaborative testing) aim at two primary objectives: higher motivation, and peer learning. Additionally, since a student's grade does not depend on a single performance, they are likely to be less stressed, and the second stage can be a form of immediate feedback. They are most commonly used for low-stake weekly quizzes as a form of applying what the students have learnt in the previous class or at home. Despite their potentials and advantages, two-stage assessments have certain limitations which make them not the most effective active learning alternative.

- Two-stage assessments are most commonly synchronous with limited time. This does not recognize each learner's unique capacity to develop the competencies at their own pace.
- Two-stage assessments are fundamentally judgmental. They are based on the traditional carrot-and-stick paradigm. This compromises student autonomy and responsibility.
- Free riding, outsourcing, and domination are inevitable in the second stage of such assessments. An unintended consequence of this is lower determination among some students to push to their limits.

One insight from Scandinavian schools—which are among the most successful in the world—is that they are simply not based on examination. While grades can be a strong incentive for students, their learning can also be driven through self-motivation. And while peer learning is certainly an integral part of effective pedagogy, it need not occur synchronously in the context of an assessment. As explained in the video above, active learning is by nature asynchronous.

A more effective alternative is to have the students work on similar questions with an element of choice and creativity. This will enable them to assimilate and own the activity, and take responsibility for it authentically. Their motivation will no longer be to earn points on the gradebook, but the activity itself will be its reward. This is the essence of the gamification of learning. This alternative is discussed further in the next section.

If our objective in education is originality and creativity—as demonstrated by Bloom's taxonomy—then we must seriously question our basis of assessment. Our common numerical scales are based on the assumption that there is a universal standard that everyone must measure up to. While such a standard can be applicable to some minimum levels of performance, it becomes increasingly contrived, arbitrary and unjustifiable at higher levels of performance. An original performance is intrinsically peerless and

cannot be compared with another. At most, we can verify that the student has mastered the required competencies of the course, but that would be a minimum at that level of performance. That is how grades start to lose their role and applicability at higher stages of learning. They are neither needed to motivate creative learners, nor meaningful in reflecting their academic achievement.

In line with the idea of autonomy as the driving force of active learning, as well as the principles of gamification of education, it is advisable to opt out of a 0-100 grading scheme, for a broader, less judgmental, and more descriptive scale. Here is a three-scale suggested alternative with instructive description for the students:

- **+** (Plus): You can create your own activity on the lesson and teach it to others.
- **✓** (Check): You are on the right track and have got the main ideas, though you have made some minor mistakes and your answer needs a bit more refinement.
- **?** (Question mark): You have missed a major learning objective of the lesson and need to redo after reviewing the sample solution. Develop your ideas further and be more specific with the concepts.

Teachers should not be reluctant to give students the chance to redo an activity. If what is being asked is *creativity*, a redo will not be a regurgitation of the teacher's or other students' answer, but will be another original production. That, after all, is what we want from our students. If they are willing to achieve such level of competency, we should not hesitate to acknowledge their performance and reward them for it. Likewise, autonomy and creativity call for relaxing strict due dates. If we want our students to operate on the level of creativity and direct their own learning, we must give them the time that each needs to do so authentically. Their acquisition of the competencies should be given a higher priority than any consideration of deadlines or grade distribution. This is a gestalt shift in education, from one of rule-based approach to one of choice-based design. It is replacing a top-down mentality with a bottom-up one, as discussed at the beginning of the portfolio.



"In Roman numerals that's 100!"

A Template for Creativity and Evaluation

As explained in the video above, giving students *choice* helps to foster *autonomy*, which is the backbone of *motivation*. Here's a simple two-stage generic activity which can be used as a template in a wide range of disciplines and contexts:

1. Create a difficult test question based on this week's lesson and post it on the course's shared space.
2. Answer to two other questions by your classmates and rate them based on their level of difficulty.

The first stage doesn't have to be a question, but it can be a creative writing, personal reflection, or a link to one's previous knowledge. In that case, in the second stage other students would evaluate the post based on its accuracy and thoughtfulness. The important condition is *creativity*. The first stage alone resembles cooperative learning. The second one brings in collaborative learning. Together, they provide a good model for active learning.

This template can be easily customized to fit the module at hand, but the general idea is to have two main stages with *choice*. The teacher must model it for the students the first couple of times to illustrate what level of creativity is being asked and how diverse is the range of acceptable replies. After that, the students will be on their own as autonomous learners. Here are a few examples for how the above template can be used to develop autonomous self-sustaining activities.

a) Literature: The Odyssey

1. Choose one of Odysseus' adventures on his return home. Write a one-page scenario from the 21st century which resembles the same adventure in our time, using the literary techniques that you have learnt in the course (400-500 words).
2. Choose two posts from your classmates and match them back with *The Odyssey*. Select at least three literary techniques in their scenario and explain how each corresponds to Homer's language.

b) Physics: Projectile Motion

1. Pick your favourite ball game athlete and put them in a hypothetical projectile motion scenario where their shot would determine whether their team wins or loses in the last few seconds of a major tournament. Write this as a test question where you give all the needed variables to find the answer. Let your classmates figure out the answer.
2. Answer two other students' question. Show all your work. If a question already has an answer, evaluate how complete it is (be specific) and draw a free body diagram for it.

c) Math: Baking

1. What is your favourite dessert? Find its five main ingredients. Suppose you want to make 500 grams of it. How much of each ingredient would you need? For simplicity, assume that the weight of the final product is the exact sum total of its ingredients.
2. Find the dessert of two other students which you also like, and "garnish" it for them. Pick your own garnish. How many grams of it would you need to be midway between the two ingredients which are used the least in your own dessert?

There are several pedagogical advantages achieved by this model:

- creativity, in the first stage;
- evaluation, critical thinking and peer learning, in the second stage;
- higher sense of autonomy and responsibility in students;
- a self-sustaining system with minimum need of intervention or grading by the teacher;
- a bank of questions that can be used for the test.

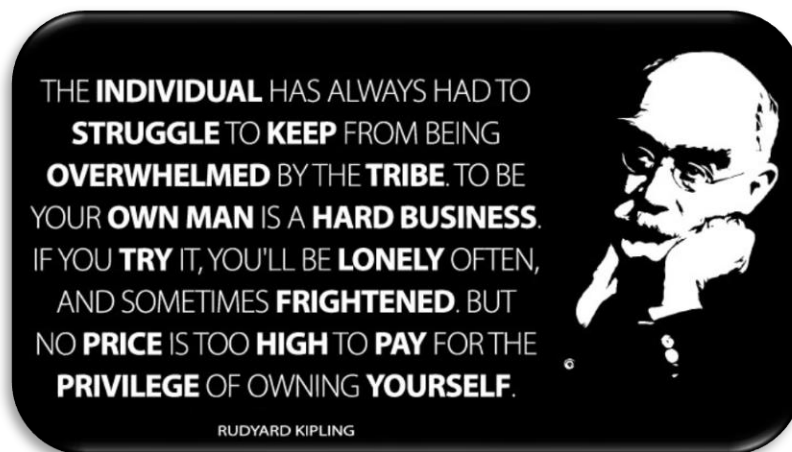
The last item can help enhance our assessments since they will be compatible with what the students do during the term. It also makes the entire course very student-centred.

In giving students choice, it helps to distinguish between longitudinal and latitudinal diversification. Longitudinal, also known as vertical, is useful in smaller formative activities. When we teach different stages of the *same* process (such as the same condition in medical fields), we can give students the choice to create a question on their preferred stage in the first round, and then complement each other in the second round, like a jigsaw. Latitudinal, also known as horizontal, is more applicable to major activities and assessments at the end of a module. This is when each choice contains all the learning objectives that we want, though the details and specifications may vary. The distinction applies to all disciplines.



Bloom's Taxonomy

The highest tier of Bloom's Taxonomy is creating. While we look up to this as a very desirable objective, it is fraught with profound complications. It is one thing to admire it, but quite another to implement and live up to it. First, if we want our students to be creative, we must start with ourselves. How creative are we to expect it from our students? Second, while we push for *authentic* learners and *independent* thinkers, we must bear in mind that the foundation of society is *conformity*. A society of fully creative individuals is a paradox. Those who are original do not belong. They are the exceptional individuals who dare to stare into their [existential abyss](#).



Our own education did not train us to be creative. Nor have we *evolved* to be. From quite an early age, we learn that the key to survival is conformity, not creativity. By being original, one has a slim chance of making a leap and outstripping others, but for all practical purposes, the odds are against us. So we wisely choose to play it safe. And we do such a good job in stifling this creativity both in ourselves and in our children, with the seemliest pretexts and justifications. Should anyone not respect the rules or contravene the conventions, they are relegated in a way that would be a lesson to anyone else who contemplates outside the mainstream. We don't even want to hear it, let alone think about it. That's why the *übermensch* (Nietzsche's Zarathustra) has to live in the mountains, having no place in the society. And the one who is bold enough to break the idols and declare the death of God is labelled a madman. This predicament of the authentic was most powerfully expressed by Rudyard Kipling:

In any institutionalized setting, there is little room for creativity. This applies equally to both students and teacher. We prefer to maintain the status quo, not only in how we teach to our students, but also in how we evaluate and treat our colleagues. Nevertheless, we must try to develop this creative capacity in ourselves and our students to the extent possible. It is both desirable and practical, at least in relative terms. If we're convinced about the merit of creativity, then we better foster it in ourselves first, and then model it for our students. That is swimming against the current, an *active* endeavour in the most genuine sense of it.

The creating stage of Bloom's taxonomy is reflected in the following 200-line epic. The themes and images in this poem were inspired partly by: (a) Rumi; (b) Plato's *Apology* and allegory of the cave; (c) "The Emperor's New Clothes" by Hans Christian Andersen. is a literary folktale. Note that the Greek root *poētēs* means both poet and creator.

Bloom's Ratsonomy

The rats underground, not exposed to sunlight,
They've eyes on their head, but they have no sight.

The world of the rats is the tunnels they have dug;
They roam around in the dark, in the earth, so smug.

One day the bunny came across their hole,
He lowered his head and called out the mole.

"Go away" they reacted to the unwanted guest;
Anything from above, to them, was a pest.

"Why are they so attached?" the bunny was shocked;
So he tried his luck once again and knocked.

"Why don't you come out to observe the sun?
There are flowers and fruits, up here, a ton.

It's dark and damp, you're immersed in dust;
I'm calling you to meadows, so why are you fussed?

There is more in the store for you, if you want;
What have you in the dark that you proudly flaunt?"

The rats didn't care; they insisted to stay
Miserable in a hole, to die and decay.

"Thanks, but we pass. We don't want any light;
We're fine as we are; don't ruin our delight."

"If you raise your head just a little, you'll see
Abundant pleasures, and then you'll be free."

The rats retorted, "But we have evidence:
There's no sun in the world; we have confidence.

No mole in the world has ever seen the sun;
You see, we've data, so our research is done.

You, bunny, are evil and you have no right
To threaten our peace by speaking of light.

That is hate speech; you're creating division;
We must be united, free of all collision.

We have the right to stay in the dark forever;
Go away, you bunny, you're not so clever.

You're blaspheming the gods and corrupting the youth;
Why should we listen when we have got the truth?

Just see what we do; aren't we creative?
Our tunnels and holes, aren't they attractive?

We need social cohesion to maintain our hole;
No bunnies are allowed; you must be a mole.

This is a safe space; don't ruin it for us;
That's it. It's over. And we won't discuss."

The bunny was appalled, "You're creative, indeed,
As long as no one questions your creed.

If you're truly creative, you must not only bear
A contrary view, but to welcome and share.

Your safe space is a coward's paradise;
If you're brave, embrace unpleasant advice.

Your emperor is naked, not to mention he's blind,
But you're praising his eyes; are you out of your mind?

The more you're active, the more you immerse
Yourselves in the dark; the gear's on reverse.

You're not being active; you're rather *reactive*;
If you question your assumptions, you may be creative.

You're preaching so well; how about some practice?
Are you striving to a paradise of learning like this?"

"Bunny, you'll perish, if you fall out of the norm;
Are you looking for trouble? Why don't you conform?

Don't speak to us; we do not want to listen;
Anything that you say is a hateful lesson.

You don't have any right to disturb our peace;
Since you are so squeaky, you will get the grease.

We'll stifle your voice if you say anything
That weakens our assurance in how good is our king.

Your sun is repulsive to us, so be quiet;
You're causing our members doubt and disquiet.

You are such a gadfly, annoying, go away!
Let us not be awakened by the sun and its ray.

Here's a safe space; we have no room for light;
You're fomenting discord; we're going to fight."

The world of the rats can be summarized so far:
Cultish, superficial and intolerant they are.

In the name of cohesion, tolerance and respect
They show intolerance and violence, in effect.

Rats are active, but only in the dark;
If light shall come in, like dogs they bark.

The king of the rats is ever so rigid;
A lying pharaoh underneath the pyramid.

In the world of rats there is one deadly sin:
To *question* the norm that always has been.

Just like the army, there is no *why*;
For rats are happy to conform and comply.

“Do not continue, I command you, I’m the boss;
If you do not obey, you’ll end up on the cross.”

“Put this up! Take that down.” There’re orders alone;
As when one approaches a high danger zone.

In a world of rats, the bunny has no voice;
They dictate everything, and there is no choice.

The one who’s creative cannot be coarse;
One isn’t creative when they resort to force.

They applaud themselves, “how creative we are,
As long as the light of the sun is afar.”

They’ve a cult of their own and kneel to a god;
Not active, nor creative; it’s just a façade.

Pitiable is the state of rats who insist
On staying in the dark, and to change resist.

Rats are creative in closing the door,
Driving off opposition by creating uproar.

“Why can’t you, O bunny, be a follower like us?
The dark isn’t so bad, so what is all the fuss?

You are ruining the bond and peace in our team;
Like the salmon you’re swimming up against the stream.

If you’re joining our club, we will call you active;
If you get creative, we won’t be supportive.

If you accept our cult, we’ll esteem you high;
If you want to be unique, we won’t ratify.

We’ll silence your voice, and you’ll have to repent
For whatever with which we’re not content.”

So much intolerance, hostility and mistrust,
Towards anyone not covered by dust.

In filth and dust they wallow, and dislike
The smell of fresh air of the bunny and the like.

The death of the sun is the dream of the rats;
To them everyone is a threat, but the bats.

Violent, intolerant, for they haven't the power;
In a tight dinky hole they prefer to cower.

They're blind and cannot entertain the thought
That there's more to the world than what we have sought.

To the bunny, the creative, everything is welcome;
He's not shy to entertain any ideas that come.

Regardless of the source, no matter how odd:
"Bring it on, I'm ready. In science there's no god."

Willing to compete, the bunny's innovative;
To all kinds of suggestions, forever, receptive.

Because he's authentic, he's not intimidated;
From dark tight tunnels, he is liberated.

Rats live in herds; they're hard to tell apart;
They conform to the norm, and rarely depart.

If a million blind rats say the sun doesn't exist,
If they swear at the day, while clenching their fist,
If they crawl into dark tunnels in the earth,
The bunny is not moved, for they have no worth.

Rats like to wallow in damp underground;
And yet they imagine a treasure they've found.

Rats are not open to challenge or split;
"Since we've got the truth, you shut up and sit.

We've got the data, so whatever you say,
By default is abuse, nonsense and stray.

Hades is ours! Cant you see we are active!"
Active in Hades? That's not so attractive.

Rats shut their ears, as they have shut their heart;
A rich conversation, with them, can't start.

If they're driven by data, they can't ever claim
That "this is definite and the end of the game."

Science is open to challenge, forever;
What the rats maintain is dogma, however.

It's not scientific, but a contradiction
To say "we have data, and that's our conviction.

You have to shut up, for we have the evidence";
That defeats the spirit and purpose of science.

They are in favour of data, as far as it will
Confirm their assumptions, so they don't feel they're ill.

But not if the evidence will put into question
Their cultish empire, and their profession.

When contrary views create conflict,
Creativity is dropped, and the rats are strict.

"You're ruining our pleasure in the dark; go away";
There are benefits they draw, as a group, from clay.

Safe space and respect are only an excuse
For the power of the rats to preserve and diffuse.

"We must satisfy everyone"; that's the first
Principle by which creativity is burst.

That's a sure formula to stifle anyone
Who does not conform, but speaks of the sun.

The bunny has no choice, but to be quiet and pass;
It is blind obedience they want en masse.

Yet rats are the rule; the bunny's an exception;
And he pays a heavy price for having perception.

Rats hold meetings but the substance is none;
They don't want to innovate; it's only for fun.

What the rats say and do, is just pacifying;
Their religion, at most, is self-satisfying.

In blindness and darkness, rats are ignorant;
And exactly for that, they are arrogant.

By opposing the sun, they're rendered deprived;
By thinking they're done, they're rendered depraved.

In filth and dust they wallow, and dislike
The smell of fresh air of the bunny and the like.

But the smell of the rats is as unattractive
To those whose minds are free and creative.

The creative are humble: they know there could be
In a world so wide, other angles to see.

It takes a bunny, liberated from the earth,
With a wide imagination, unbounded by dearth,

To the top of pyramid the bunny can hop;
The rats have no eyes to even observe the top.

They don't have the courage to come out of their hole;
In the dark underworld, they have lost their soul.

Breaking the idols is a virtue or a sin,
Depending on the god one worships within.

The god of the bunny is the sun, and the dark
 Is the god of the rats and their patriarch.

The bunny hops off on its course; it's gone;
 While the rats are in loss, veiled from the dawn.

The bunny's unpleasant to the rats, and they are
 Unpleasant to him, but they're not on a par;

For the bunny's expanse to embrace them all;
 His honey overrides their anger and gall.

Rats are aggressive because they are blind;
 But the bunny is seeing, so let it be kind.

Though the rats are coarse, O bunny, you must
 Be softer than silk to rub off their rust.



From Having, to Doing, to Being

Building on the video above, we often identify with our possessions: we are what we own. In the education arena, this translates into valuing the acquisition of facts. That is where the teacher takes the centre stage and imparts content to the students. At this level, we are “human havings.” The next stage is to shift our focus to things that we do, produce and achieve: we are the activities which fill our days. In terms of education, this corresponds to the students being constantly busy with learning activities, conducting conversations and producing content. Much of the active learning literature and practitioners pertain to this level, where we are “human doings.” Erich Fromm offers a third stage, which is that of “human beings.” That is where learning is not a mode of *having*, nor a mode of *doing*, but a mode of *being*. And this extends far beyond education, as Fromm explains in *To Have or To Be*:

In modern usage activity is usually defined as a quality of behavior that brings about a visible effect by expenditure of energy. Thus, for instance, farmers who cultivate their lands are called active. . . . Activity in the modern sense refers only to *behavior*, not to the person behind the behavior. . . . The modern sense of activity makes no distinction between *activity* and mere *busyness*. But there is a fundamental difference between the two that corresponds to the terms “alienated” and “nonalienated” in respect to activities. In alienated activity I do not experience myself as the acting subject of my activity; rather, I experience the *outcome* of my activity—and that as something “over there,” separated from me and standing above and against me. In alienated activity *I* do not really act; I am *acted upon* by external or internal forces. I have become separated from the result of my activity. . . . In nonalienated activity, I experience *myself* as the *subject* of my activity. Nonalienated activity is a process of giving birth to something, of producing something and remaining related to what I produce. . . . “Productive”

as used here does not refer to the capacity to create something new or original, as an artist or scientist may be creative. Neither does it refer to the product of my activity, but to its *quality*. A painting or a scientific treatise may be quite unproductive, i.e., sterile; on the other hand, the process going on in persons who are aware of themselves in depth, or who truly “see” a tree rather than just look at it, or who read a poem and experience in themselves the movement of feelings the poet has expressed in words—that process may be very productive, although nothing is “produced.” Productive activity denotes the state of inner activity; it does not necessarily have a connection with the creation of a work of art, of science, or of something “useful.” Productiveness is a character orientation all human beings are capable of, to the extent that they are not emotionally crippled. Productive persons animate whatever they touch. They give birth to their own faculties and bring life to other persons and to things. “Activity” and “passivity” can each have two entirely different meanings. Alienated activity, in the sense of mere busyness, is actually “passivity,” in the sense of productivity; while passivity, in terms of nonbusyness, may be nonalienated activity. (Fromm, 1976, pp. 73-75)

Likewise, Elizabeth F. Barkley clarifies in *Student Engagement Techniques*:

a chess player may sit for hours without talking or moving, but his or her mind is actively engaged in studying the layout of the pieces and strategizing the next move. Highly skilled listeners who are involved in a lecture by self-questioning, analyzing, and incorporating new information into their existing knowledge are learning more actively than students who are participating in a small group discussion that is off-task, redundant, or superfluous. (Barkley, 2010, p. 17)



The Art of Fishing

Competency-based education is teaching the learner how to fish. Active learning tries to direct the learners to achieve this in an authentic way. This means that the fish that one learner catches may be quite different from that of another. Active learning is not about imparting knowledge, but about offering options to choose from in order to build one’s way. This could be through a pair of ragged shoes. The teacher’s role is not to carry the students, but to give them shoes with which they can embark on their own journey. Concerning higher education, Jacob Bronowski says in *The Ascent of Man*: “It is important that students bring a certain ragamuffin, barefoot irreverence to their studies. They are not here to worship what is known, but to question it” (Bronowski, 1974, ch. 11).



Thus Van Gogh's "A Pair of Shoes" (1886) reflects art, beauty and growth in the mundane. To him, art is not about aesthetics, nor limited to the aristocracy and the bourgeoisie. Rather, art is an original expression of a unique personal experience. And while the two shoes complement one another, each has its own shape and cannot be moulded into the other's. Some are called to catch fish; others are fishers of men; and some may find a shoe in their net. Yet, all could be active learning, as long as they are an autonomous response to an authentic calling.

Marginalized Artists

Art is an original representation
Of an authentic personal experience.

It's not to spatter colour on a canvas,
But it's a mode of being: to live a colourful life.

Art, by nature, is unique and unmatched;
If you imitate another artist, it's no longer art.

The foundation of society is rather conformity;
It's when people agree on some common grounds.

Community is a communion around some unity;
It's built around its members' commonality.

Thus the artist does not belong;
Art and belonging contravene at the core.

Get used to be alone on your own
To the extent that you wish to be authentic.

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