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*three-scene storyboarding*  
the curriculum dynamics

*The* Career-learning CAFÉ

bill law's three-scene storyboarding - © 2010

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This handbook probes the usefulness of a radical new way for working on curriculum. System thinking, like storyboarding, shows how - whatever we do - there are causes and consequences that we can easily miss. The deeper we get into managing change the more important this kind of thinking becomes.

But there are also immediate practical uses. A system thinking 'throughput', applied to storyboarding, graphically shows what is going on, how things work, and why they are useful. We need this, and so do our stakeholders. They need to be able quickly to scan the key elements. You'll find here a two-page account of what the scheme-of-work sets out on nine pages. And the formatting is flexible enough to make shorter presentations possible.

But system thinking has more radical uses. It can map curriculum onto other related systems. We are used to asking about how curriculum relates to the personal world of individual students. And storyboarding can sharpen our understanding of that. But it also requires us to ask how curriculum belongs to its wider hinterland. And that raises questions about how we should now be locating curriculum in relation to working life and its links with local communities and global sustainability.

Storyboarding enables people to manage both that up-close individuality and that claim to membership of a global community. System thinking probes:

- > how students manage these realities;
- > how we manage curriculum;
- > what constitutes good management;
- > why we should be paying more attention to what goes wrong.

It throws up ideas and resources that we have not yet learned fully to use.

*storyboarding overview - [www.hihohiho.com/storyboarding/sboverview.pdf](http://www.hihohiho.com/storyboarding/sboverview.pdf)  
in curriculum - [www.hihohiho.com/storyboarding/sbcurriculum.pdf](http://www.hihohiho.com/storyboarding/sbcurriculum.pdf)*

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*this handbook - [www.hihohiho.com/storyboarding/sboutline.pdf](http://www.hihohiho.com/storyboarding/sboutline.pdf)*

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## curriculum as a system

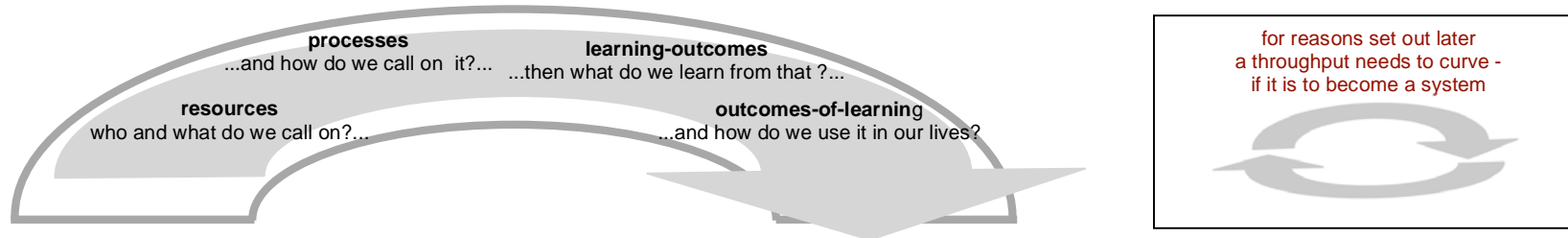
Contemporary change calls for a radical re-examination of curriculum. We need to ask again what - in contemporary conditions - curriculum is for, how it works and why we need it. **System thinking** poses those questions. But **schemes-of-work** and ready-made published materials do not. They do little more than set out what teachers and students can do - everything else is assumed. System thinking works in a deeper and a more challenging way - not with a step-by-step guide, but by probing sustainable causes and useful effects.

It means tracking significant **elements** in what happens. For example, resources, method, and outcomes are important in all curriculum. But, because they are learning-for-living, the outcomes of storyboarding cannot just be found in assessment, there must also be **transfer-of-learning** to life. So the significant elements of storyboarding are:

<b>resources:</b>	who and what do students call on?
<b>processes:</b>	how do they use those resources?
<b>learning-outcomes:</b>	what do they learn?
<b>outcomes-of-learning:</b>	how do they use that learning in their lives?

They are significant because each element needs, and is needed by, all of the others. There can be no process without resources, both are necessary to learning, but classroom learning is no more than a step on a longer journey.

And so you need to know not only that students are learning - for example about decision-making. You need to know where in their lives your students can imagine using it. That might mean bringing in selection materials and involving people who know about recruitment. But in some lives recruitment does not get a look in until students know that friends and family are supportive - or, at least, not dismissive. And working on that needs other resources. Thinking first about outcomes-for-learning shapes ideas about what things and people to call on. The links can be mapped into a **throughput** - like the one in the diagram.



In system thinking we need to see how each of the elements belongs to the rest. A throughput shows what is brought into the system, what happens in the system, and what that means for how the system plays out.

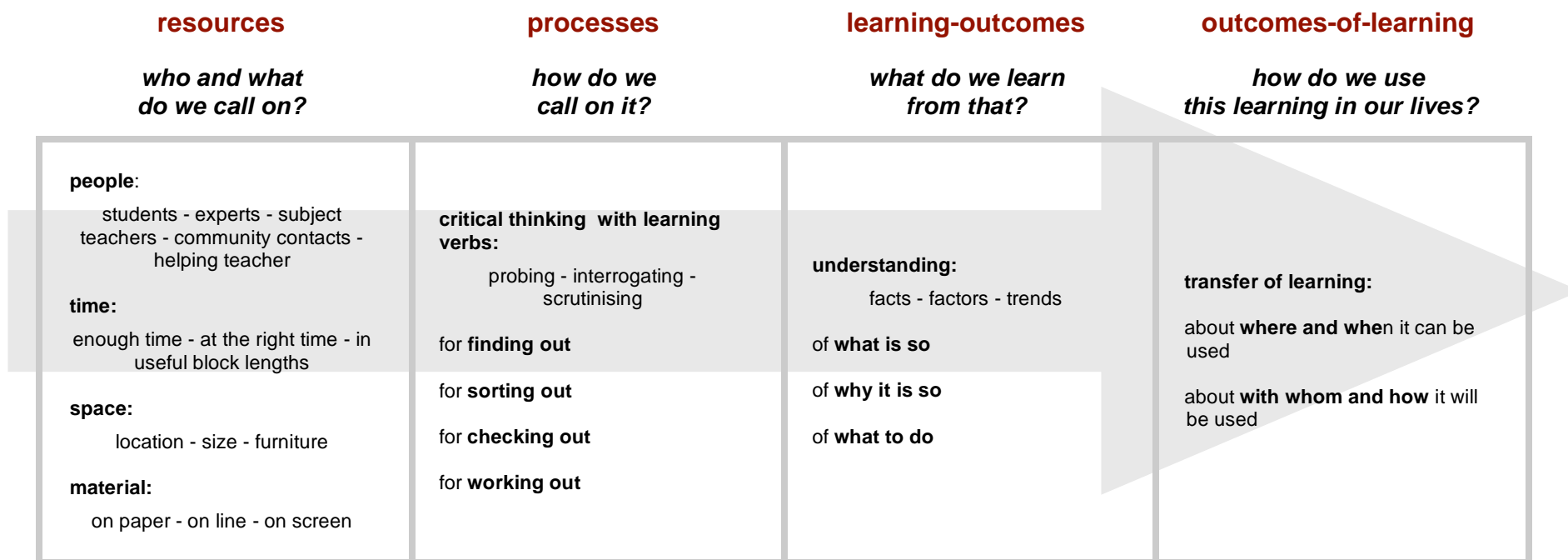
*scheme - [www.hihohiho.com/storyboarding/sbscheme.html](http://www.hihohiho.com/storyboarding/sbscheme.html)  
transfer - [www.hihohiho.com/storyboarding/sboverview.pdf](http://www.hihohiho.com/storyboarding/sboverview.pdf) - page 10*

## practical uses of system thinking

Some uses of the word '**system**' make it refer to the organisation and its procedures, rather than to people and what they actually do. It crops up in talk of defending the 'self' against the 'system'. But this is not advanced system thinking. Recent uses of the idea indicate how people and organisation are interdependent.

The core question for system thinking is what makes a difference to how well - or badly - things work out. It means going into detail about the significant **elements**. The **throughput** (below) links curriculum elements into sequences of **causes-and-effects**. This is not the order in which a 'lesson' is 'taught' - it is how, in any classroom, one thing always depends on another.

This throughput - straightened-out for graphic purposes - goes into that kind of detail and makes those kind of links explicit. It has immediate practical usefulness.



The following two pages show how information like this is set out for storyboarding. There are four successive throughputs, corresponding with the four phases in the scheme.

*scheme - [www.hihohiho.com/storyboarding/sbscheme.pdf](http://www.hihohiho.com/storyboarding/sbscheme.pdf)  
learning verbs - [www.hihohiho.com/storyboarding/sboverview](http://www.hihohiho.com/storyboarding/sboverview) - page 9*

## seeing it work

### *the introduction to storyboarding*

	resources	process	learning-outcomes	outcomes-of-learning
making your story interesting	<p><b>time:</b> 120 minutes (or 60 minutes with personal work as 'homework')</p> <p><b>people:</b> students for sharing feedback teacher to facilitate</p> <p><b>equipment:</b> moveable furniture whiteboard</p> <p><b>material:</b> completed 'showing' 'showing' format 'locations' handout</p>	<p><b>whole-group:</b> remembering scenes, episodes &amp; turning points</p> <p><b>personal:</b> seeing how storyboarding can look and trying it out</p> <p><b>small-group:</b> comparing different ways of doing it</p> <p><b>whole-group:</b> finding points-of-view &amp; examining locations</p> <p><b>personal:</b> working on a three scene scenario</p> <p><b>whole-group:</b> probing different ways of doing this</p>	<p><b>knowing what:</b> key features of a story: &gt; scene &gt; episode &gt; turning-point &gt; character &gt; points-of-view &gt; locations</p> <p><b>knowing how:</b> &gt; to link these features into a recounted narrative</p>	<p><b>knowing where and with whom:</b> so that when you are at home, with friends...</p> <p><b>knowing why:</b> ...you can take on... &gt; being interesting in telling others about people you admire &gt; and saying what you want to do</p>
remembering what matters	<p><b>time:</b> 120 minutes (or 60 minutes with personal work as 'homework')</p> <p><b>people:</b> students for reciprocal feedback teacher to facilitate</p> <p><b>equipment:</b> moveable furniture whiteboard</p> <p><b>material:</b> 'ambiguous' handout completed 'remembering' 'remembering' format 'three-scene' handout</p>	<p><b>whole-group:</b> working on dialogue at a turning-point</p> <p><b>personal:</b> creating a 'big scene' 'opening scene' and 'following scene' from scratch</p> <p><b>small group:</b> examining different things that can be important in this episode</p> <p><b>whole-group:</b> preparing to work on their own episodes</p> <p><b>personal:</b> organising memories that belong to an episode in their lives</p> <p><b>whole group:</b> reviewing progress preparing for next session</p>	<p><b>knowing what:</b> key features of a story: &gt; big scene &gt; opening scene &gt; following scene &gt; dialogue &gt; voice-over &gt; inner-life &gt; the lead role</p> <p><b>knowing how:</b> &gt; to select key features in an episode &gt; to sequence them into a narrative</p>	<p><b>knowing where and with whom:</b> so that when you dealing with recruitment and selection people...</p> <p><b>knowing why:</b> ...you can take on... &gt; have your ideas sorted out &gt; you know what are the most import things about you to get across</p>

	resources	process	learning outcomes	outcomes of learning
<b>showing</b> so that people understand	<p><b>time:</b> 120 minutes (or 60 minutes with personal work as 'homework')</p> <p><b>people:</b> students for reciprocal feedback teacher to facilitate</p> <p><b>equipment:</b> moveable furniture whiteboard</p> <p><b>material:</b> completed 'three scenes' 'completed 'showing' 'showing' format</p>	<p><b>whole-group:</b> practising 'remembering', 'showing', and 'futuring'</p> <p><b>personal:</b> taking an 'audience' view of a story</p> <p><b>small-group:</b> probing how another view-point changes how things are seen</p> <p><b>personal:</b> taking an 'audience' view of their own story</p> <p><b>personal work:</b> assembling three scenes from their own story -</p> <p>whole-group: getting ready for the final session</p>	<p><b>knowing what:</b> key features of a story:</p> <ul style="list-style-type: none"> <li>&gt; remembering</li> <li>&gt; showing</li> <li>&gt; futuring</li> </ul> <p><b>knowing how:</b></p> <ul style="list-style-type: none"> <li>&gt; to observe another person's story</li> <li>&gt; to reflect on your own story</li> </ul>	<p><b>knowing where and with whom:</b> so that, wherever you are and whoever you are with</p> <p><b>knowing why:</b> ...you can take on...</p> <ul style="list-style-type: none"> <li>&gt; helping other people to know you better</li> <li>&gt; in the ways that you need them to know you</li> <li>&gt; with a real sense of how you see-think-feel about what's happening</li> </ul>
<b>futuring</b> that makes things happen	<p><b>time:</b> 120 minutes (or 60 minutes with personal work as 'homework')</p> <p><b>people:</b> students for reciprocal feedback teacher to facilitate</p> <p><b>equipment:</b> moveable furniture whiteboard</p> <p><b>material:</b> role-play handout futuring handout 'futuring' format 'scenes-in-my-life' format</p>	<p><b>role-play group:</b> observing what helps in recounting experience</p> <p><b>whole-group:</b> noticing how people say and listen to stories &amp; link present to future</p> <p><b>personal:</b> anticipating action &amp; assembling remembering-showing -futuring into 'scenes in-my-life' page</p> <p><b>whole group:</b> testing the all-round usefulness of this scheme</p>	<p><b>knowing what:</b> key features of futuring:</p> <ul style="list-style-type: none"> <li>&gt; places to go</li> <li>&gt; people to talk to</li> <li>&gt; plans to make</li> <li>&gt; learning-outcomes</li> <li>&gt; outcomes-of-learning</li> </ul> <p><b>knowing how:</b></p> <ul style="list-style-type: none"> <li>&gt; to say what you want</li> <li>&gt; to say why</li> <li>&gt; to get what you need to do into useful shape</li> </ul>	<p><b>knowing where and with whom:</b> so that, when you are with people who can help you realise your plan - helpers and recruiters</p> <p><b>knowing why:</b> ...you can take on...</p> <ul style="list-style-type: none"> <li>&gt; saying what you seek</li> <li>&gt; saying why you seek it</li> <li>&gt; saying how you know</li> </ul>

## how a throughput helps

The throughputs - set out on two pages - show what the scheme-of-work sets out on nine. Scheme **designers** and **teachers** need to work in that kind of minute-by-minute way. But there are a lot of people who, though they need to know about your work, do not need that kind of detail.

You need enough to be able to talk people through what they need to ask - if they are to understand it for their purposes....

	<i>who and what do we call on?</i>	<i>how do we call on it?</i>	<i>what do we learn from that?</i>	<i>how do we use this learning in our lives</i>
<b>storyboarding</b> life's turning-points and what to make of them	<b>time:</b> four two-hour sessions	<b>personal work:</b> getting your own ideas in order		
	<b>people</b> each other experts help with the process	<b>small groups:</b> trying out ideas	<b>knowing what:</b> > remembering > showing > futuring	<b>knowing where and with whom:</b> when we need to tell other people who are important to us
	<b>equipment</b> furniture we can move around & the whiteboard	<b>whole-group:</b> comparing suggestions about what counts	<b>knowing how:</b> > to get what we need to do into useful shape	<b>knowing why:</b> > what we seek > why we seek it > how we know
	<b>material:</b> formats for designing our own story	<b>role-play group:</b> trying things out		

A **curriculum managers** would need a different version for different **stakeholders** - all of whom need to know what is going on, how it works and why it is worthwhile.

<b>students</b>	need to know what they are being invited to spend time and energy on
<b>potential partners among colleagues and in the community</b>	who a curriculum manager needs to interest in taking part
<b>families. community-groups, business-people and other stakeholders</b>	who have a right to know what the team are doing - and why
<b>management and governors</b>	whose interest and support the team needs

*curriculum - [www.hihohiho.com/storyboarding/sbcurriculum.pdf](http://www.hihohiho.com/storyboarding/sbcurriculum.pdf)*



## radical uses of system thinking

**System thinking** needs more than a **throughput**. It shows **outcomes** as **resources** - that needs a re-cycling format which links outputs back into inputs. And, as the diagrams (below) suggest, system thinking can also show cycles within cycles. Systems within systems is the reality - organic systems range from amoebic life to a global biosphere. So, if we think bigger about storyboarding-based programmes, we can see them as part of a **wider hinterland**. And that calls on a progressively widening range of ideas about what storyboarding can do...

- ... in all parts of **curriculum**
- ... in a wider concept of **education**
- ... needed in a **community**
- ... part of a **changing world**
- ... for a **sustainable economy**
- ... in an **inhabitable biosphere**



But every person in your class is as complex as the global environment. A storyboarding-based programme also hosts that **up-close-and-personal** system. And that means focussing attention down to how storyboarding works with...

- ... distinctive personal **experience**
- ... with its **cultural** belief, values and expectations
- ... internalised as **thoughts and feelings**
- ... reaching into what is **unspoken and intuitive**
- ... with **luck and impulse** playing their parts
- ... some calling up **instinctive** responses



Every organism is a system, nested in a habitat, located in an environment and part of a global system. Whatever we do anywhere in that system has consequences for the whole. Take, for example what we do in curriculum about aspiration, enterprise, achievement and work - all have a carbon footprint.

If you aren't confused you are missing something. Reducing the confusion by setting an arbitrary distinction between 'self' and 'system' misses the point. Self and the system are made of each other. Informed confusion about that serves us better than simple and dismissive certainty. The greater danger is to treat curriculum as though it were a fragmented part of a neglected whole. Which points to one other feature of organisms - they can, at every level, be mismanaged.

*short account - [www.hihohiho.com/storyboarding/sboverview.pdf](http://www.hihohiho.com/storyboarding/sboverview.pdf)*

## management and mismanagement

Curriculum can be examined in terms of what is **deliverable** - as **components** of an **entitlement**. This thinking looks for **improvement** by slicing-and-dicing curriculum. People can then list components, slot them in, and check them off. It fragments learning into **targeted** requirements. And the selection of targets depends on what lobby is calling the shots, seeking...

*what will defend these interests?  
or lead to those gains?  
or suit such-and-such expectations?*

It is **one-track** thinking; but moving on in life usually means taking one thing with another - making links. The links on page 6 play out in career **narratives**. And in real stories there is always more than one track to take into account:

*I go to school to be with my friends  
my work-life mustn't hurt my daughter's life  
I don't much think about how work produces stuff I just go shopping  
recruitment must wait until I've sorted this out with my friends  
I can't support an employer with a bad record in Africa  
I need to know the carbon footprint of this firm*

Storyboarding finds these links. But much of what it shows is either invisible to one-track thinking, or it is sidelined. One form of sidelining is **externalisation** - *these other consequences are outside our immediate concerns and are not our responsibility*. At worst it gives us 'dog-show' blindness to sad creatures, paraded at competitive events. Ignoring what does not come immediately to mind can destroy what people claim they are trying to improve.

System thinking is useful most-of-all for how it **re-frames** that thinking. It certainly causes us to look again at **evidence-based** practice. No stand-alone evidence can comprehend a system, because no system stands alone. **System thinking** insists that we take one thing with another. The previous page adds levels to curriculum thinking.

<i>three levels...</i>	<i>...for avoiding the danger...</i>	<i>...and grasping opportunity</i>
a curriculum with input-to-outcome <b>throughput</b>	facing the possibility of damage to what we are trying to improve	seeing where a small adjustment gets big gains
inhabiting a <b>wide-and-dynamic hinterland</b>	taking onboard what can no longer be externalised	relating to changing local and global realities
hosting <b>up-close-and-personal realities</b>	maintaining contact with user experience	calling on what people recognise rather than what we ascribe

In a system what is done at any level can have consequences at all levels. Thinking in such terms improves our record on unanticipated consequences. It helps us to see that whatever we want to do, there is always something else to take into account. Gardening is like that.

*storyboarding as research - [www.hihohiho.com/storyboarding/sbresearch.pdf](http://www.hihohiho.com/storyboarding/sbresearch.pdf)*

## a sustainable curriculum

A system brings in and sends out - like breathing. All organisms form, and are formed by, such input and output. And all that moves between them is valuable to all. This reconfigures **throughput** formatting; **outcome** becomes **resource**. And curriculum is no less **organic** than a tree. It forms, and is formed, by a system.

Where outcomes become resources then **learning-for-living** sets up a special kind of **enquiry**. It seeks how the programme is working in students' lives. But it uses this information, not as an endpoint, but a means to an end - **programme improvement**. It is a **diagnostic** enquiry, conducted for **formative** purposes. In that enquiry what has not worked well is as useful as what has worked well. In all events, it means paying attention to how the curriculum is working...

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...with these **students**    ...their experiences, memories and thoughts-and-feelings - inhabiting this classroom....

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...in this **locality**    ...remembering what this community and culture brings to their lives...

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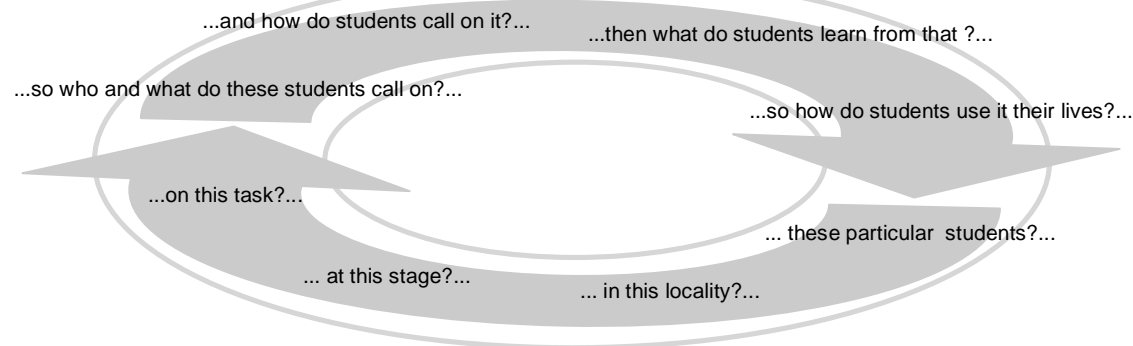
...at this **stage**    ...with ideas about life gathered from where experience has so-far taken them....

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...on this **task**    ...and now taking on new learning - useful in the world they now inhabit

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What we gather is **feedback** to **helpers** and ideas for **designers**. It is where **teachers** become **learners** and **students** become teachers. **Programme managers** are **partners** in a **system** where everything is a **resource** for everything else.



Far reaching thinking will produce far-reaching proposals. And system thinking raises serious questions for what kind of **expertise** our curriculum **subjects** should now be **covering**. Indeed, it may cause us to wonder how much **curriculum** can do. There are other systems - including **voluntary organisations** and **social enterprises** which might do better. I tried to warn you - this is radical thinking.

research - [www.hihohiho.com/storyboarding/sbresearch.pdf](http://www.hihohiho.com/storyboarding/sbresearch.pdf)

formative diagnosis - [www.hihohiho.com/storyboarding/sbcurriculum.pdf](http://www.hihohiho.com/storyboarding/sbcurriculum.pdf) - page 6

partnership - [www.hihohiho.com/storyboarding/sbscheme.pdf](http://www.hihohiho.com/storyboarding/sbscheme.pdf) - pages 5-9