
The lernOS Guide

Simon Dückert

2018-06-17

Contents

Getting Started	2
lernOS Success Factors	4
lernOS In A Nutshell	5
lernOS Sprint - Driving Agile Planning And Execution	6
lernOS Circle - From Talking The Talk to Walking the Walk	7
lernOS Dojo - Time And Place To Practice New Skills	8
lernOS Memex - Get Things Out Of Your Head And In A System You Trust	9
Appendix: lernOS Katas	10
Kata: Why Are You Here?	10
Kata: My Objective(s) For The Next 12 weeks	10
Kata: Working Alone Is Addition, Working Together Is Multiplication	10
Kata: Strong And Weak Ties	11
Kata: Your First Sharing Experience	11
Kata: A Letter To Your Future Self	12
Kata: 25 Random Things About Me	12

List of Figures

1	lernOS Wheel	4
2	The lernOS(mi) Canvas	6
3	Screenshot Frontpage TiddlyWiki-version of the lernOS Memex	9

Getting Started

We live and work in a world of constant change. With trends like globalization, digitization, and urbanization the so called VUCA world emerged. VUCA¹ stands for volatility, uncertainty, complexity, and ambiguity as described in a study by James A. Lawrence in 1991. In such an environment theories, principles, and tools for management and self-management from the 20th century have to be updated

¹https://en.wikipedia.org/wiki/Volatility,_uncertainty,_complexity_and_ambiguity

for the digital connected knowledge society of the 21st century. In his book Drive² Daniel Pink outlined that change in 140 characters: “Carrots & Sticks are so last century. We need to upgrade to autonomy, mastery and purpose”.

This is true for individuals and organizations (for-profit and non-profit). To be successful in a VUCA world you have to practice a workstyle of “self-directed lifelong learning”. You have to acquire new (digital) skills and also get used to new (digital) tools. To be successful as an organization you have to become a “learning organization”. A learning organization according to David Garvin³ is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.

In terms of learning not all knowledge has to be created from scratch, not every wheel has to be reinvented and not all mistakes have to be repeated. If you have an open mindset and connect with others inside and outside your organization you will be standing on the shoulders of giants⁴. Consultancy McKinsey found⁵ that a fully networked enterprise in contrast to companies working in silos internally and externally has a benefit of over 30%. So working in an open and connected way seems to be good for you and your organization at the same time.

The digital transformation⁶ enables new ways of working and new ways of learning. Digital transformation means that products, processes, and business models are digitized (e.g. transition vinyl record/compact disc/spotify, Airbnb as hotel company without buildings, Uber as taxi company without cars). To make use of this new possibilities digital skills have to be acquired by everybody. These skills can be learned with new methods like Getting Things Done⁷, Personal Knowledge Mastery⁸ Scrum⁹, Holacracy¹⁰, and Working Out Loud¹¹. One example: at the German engineering company Bosch 98% of employees practicing Working Out Loud say that the method helps to improve digital skills and support cultural change. You don't have to be a digital native to learn these skills. Everybody can learn them one small step at a time.

lernOS will help you and your organization to develop necessary 21st century skills¹² like problem-solving, communication, creativity, and collaboration. You can use lernOS on your own or together with 3-4 other people in a peer support¹³ group called lernOS Circle.

²https://en.wikipedia.org/wiki/Drive:_The_Surprising_Truth_About_What_Motivates_Us

³<https://hbr.org/2008/03/is-yours-a-learning-organization>

⁴https://en.wikipedia.org/wiki/Standing_on_the_shoulders_of_giants

⁵<https://www.mckinsey.com/industries/high-tech/our-insights/the-rise-of-the-networked-enterprise-web-20-finds-its-payday>

⁶https://en.wikipedia.org/wiki/Digital_transformation

⁷<https://gettingthingsdone.com/>

⁸<https://jarche.com/pkm/>

⁹<https://www.scrumguides.org/>

¹⁰<https://www.holacracy.org/constitution>

¹¹<https://workingoutloud.com/>

¹²<https://learning.mozilla.org/en-US/web-literacy>

¹³https://en.wikipedia.org/wiki/Peer_support

lernOS Success Factors

Mastering the Digital Age and the Knowledge Society of the 21st century is not a matter of implementing the right (digital) tools and methods. Starting with the right mindset and learning new skills is crucial. The lernOS Wheel brings together these success factors as mindset, skillset, and toolset:



Figure 1: lernOS Wheel

lernOS In A Nutshell

lernOS is an operating system (OS) for lifelong learning and learning organizations. The name is derived from the Esperanto verb “to learn”. Like OKR lernOS can be used on different levels:

- **Personal (lernOS mi, “I will learn”)**: use it as a personal knowledge management and productivity tool for yourself
- **Team (lernos ni, “We will learn”)**: use it as a tool for communication and collaboration on team level
- **Organization (lernos ni, “We will learn”)**: use it as an agile management system for your whole organization

This guide describes the implementation of lernOS on the personal level. The basic elements of lernOS are:

- **Objectives & Key Results**: what you try to reach and how you measure success
- **Activities**: tasks and **roles** you have, **projects** you run
- **Knowledge**: your **expertise**, know-how between your ears or codified in **knowledge assets** (e.g. checklists, presentations) stored in your **repositories** (e.g. social intranet, onedrive, slideshare)
- **Relationships**: people in your **social network** (physical or virtual) helping you to achieve your objectives

The **lernOS Canvas** (PDF¹⁴) uses a similar structure as the business model canvas¹⁵ by Alex Osterwalder. It can be used to systematically go through the elements of lernOS and create your personal management system with a strong focus on knowledge and learning.

¹⁴lernOS-mi-Canvas.pdf

¹⁵https://en.wikipedia.org/wiki/Business_Model_Canvas

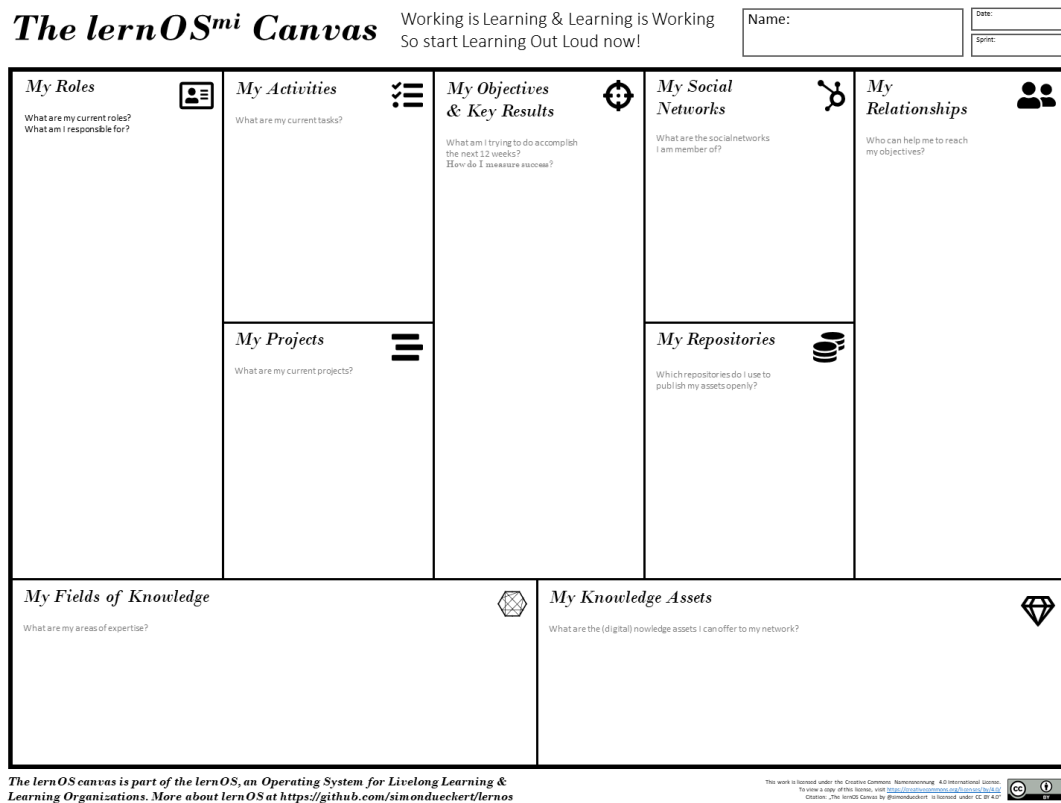


Figure 2: The lernOS(mi) Canvas

lernOS Sprint - Driving Agile Planning And Execution

A lernOS sprint consists of 13 weeks (week 0 -12). In week 0 all organizational issues meetings, communication channels, documentation etc.) and a first version of your objective(s) for the sprint are defined. The objective(s) for the sprint can be refined between week 0 and week 1. In week 1 the objective(s) are fixed for the sprint.

In week 1-12 there is a weekly 30-60-minut event called the lernOS Check-In. The Check-In is a short ceremony to track results. Every Check-In has the same agenda structur (see also The Beginners Guide to OKR¹⁶, page 38):

Agenda Item	Timebox
Warm-up: what happend since the last check-in?	... min

¹⁶<http://felipecastro.com/resource/The-Beginners-Guide-to-OKR.pdf>

Agenda Item	Timebox
Objective Progress: what changed in the Key Results since the last Check-In?	... min
Confidence Level: with the information I have today, how confident am I that I will reach each Key Result?	... min
Impediments: what is slowing me down?	... min
Initiatives: what am I going to do to improve results?	... min

lernOS Circle - From Talking The Talk to Walking the Walk

Of course you can practice lernOS on your own. But it is more fun and also easier if you practice it in a group of 4-5 people called a lernOS Circle. A Circle is a peer support¹⁷ group where people help each other by providing knowledge, experience, emotional, social and practical help. The lernOS Circle is a “circle of trust” so what happens in the Circle stays in the Circle.

In a lernOS Circle every Circle member chooses one or more individual objectives. For each objective key results are defined that measure on a scale from 0.0 to 1.0 if the objective is reach. The objectives should be ambitious so that a key result completion rate of 0.7 is considered a success.

The lernOS Circle meets each week in a 30-60 minutes Check-In with the agenda described above. The Check-in can be face-to-face or virtual. If Circle members don’t know each other it might be good to have the first Check-In’s face-to-face to get to know each others and build trust.

Tools that might help to organize communication and documentation for Circles:

- **Web Conferencing** like Skype for Business¹⁸, Skype¹⁹, Zoom²⁰, GoToMeeting²¹, Circuit²²
- **Instant Messengers** like Threema²³, Microsoft Teams²⁴, Slack²⁵, WhatsApp²⁶, WeChat²⁷, Tele-

¹⁷https://en.wikipedia.org/wiki/Peer_support

¹⁸https://en.wikipedia.org/wiki/Skype_for_Business

¹⁹<https://en.wikipedia.org/wiki/Skype>

²⁰https://en.wikipedia.org/wiki/Zoom_Video_Communications

²¹<https://en.wikipedia.org/wiki/GoToMeeting>

²²<https://circuit.com>

²³<https://en.wikipedia.org/wiki/Threema>

²⁴https://en.wikipedia.org/wiki/Microsoft_Teams

²⁵[https://en.wikipedia.org/wiki/Slack_\(software\)](https://en.wikipedia.org/wiki/Slack_(software))

²⁶<https://en.wikipedia.org/wiki/WhatsApp>

²⁷<https://en.wikipedia.org/wiki/WeChat>

- gram²⁸, Signal²⁹, RocketChat³⁰
- **Enterprise Social Networks** like Jive³¹, Yammer³², Connections³³, Lithium³⁴, Workplace by Facebook³⁵
 - **Personal Notebooks** like OneNote³⁶, Evernote³⁷, TiddlyWiki³⁸, Etherpad³⁹
 - **File Hosting Services** like Dropbox⁴⁰, OneDrive⁴¹, Google Drive⁴², OwnCloud⁴³
 - **Task Management Services** like Trello⁴⁴, Microsoft ToDo⁴⁵, Microsoft Planner⁴⁶
 - **Mind Mapping Software** like XMind⁴⁷, Freemind⁴⁸, MindManager⁴⁹, iThoughts⁵⁰, MindMeister⁵¹
 - **Weblog Software** like Wordpress⁵², Tumblr⁵³

lernOS Dojo - Time And Place To Practice New Skills

How do you become a great musician? It's good to know the theory and to understand the mechanic of your instrument. It also helps if you have talent. But real mastery comes from practicing, applying the theory over and over again, using feedback to get better every time. The place for practicing is called a dojo (see also CodeKata⁵⁴).

Traditionally a dojo is a hall or space for immersive learning or meditation. In the field of software development and agile practice dojos emerged as workshop-style events to practice methods and train new skills. Typically dojos last for several hours or days. In the dojo a skilled mentor guides the

²⁸[https://en.wikipedia.org/wiki/Telegram_\(service\)](https://en.wikipedia.org/wiki/Telegram_(service))

²⁹[https://en.wikipedia.org/wiki/Signal_\(software\)](https://en.wikipedia.org/wiki/Signal_(software))

³⁰<https://rocket.chat>

³¹https://en.wikipedia.org/wiki/Jive_Software

³²<https://en.wikipedia.org/wiki/Yammer>

³³https://en.wikipedia.org/wiki/IBM_Connections

³⁴https://en.wikipedia.org/wiki/Lithium_Technologies

³⁵https://en.wikipedia.org/wiki/Workplace_by_Facebook

³⁶https://en.wikipedia.org/wiki/Microsoft_OneNote

³⁷<https://en.wikipedia.org/wiki/Evernote>

³⁸<https://en.wikipedia.org/wiki/TiddlyWiki>

³⁹<https://en.wikipedia.org/wiki/Etherpad>

⁴⁰[https://en.wikipedia.org/wiki/Dropbox_\(service\)](https://en.wikipedia.org/wiki/Dropbox_(service))

⁴¹<https://en.wikipedia.org/wiki/OneDrive>

⁴²https://en.wikipedia.org/wiki/Google_Drive

⁴³<https://en.wikipedia.org/wiki/OwnCloud>

⁴⁴<https://en.wikipedia.org/wiki/Trello>

⁴⁵https://en.wikipedia.org/wiki/Microsoft_To-Do

⁴⁶https://en.wikipedia.org/wiki/Microsoft_Planner

⁴⁷<https://en.wikipedia.org/wiki/XMind>

⁴⁸<https://en.wikipedia.org/wiki/FreeMind>

⁴⁹<https://en.wikipedia.org/wiki/MindManager>

⁵⁰<https://www.toketaware.com/ithoughts-ios>

⁵¹<https://en.wikipedia.org/wiki/MindMeister>

⁵²<https://en.wikipedia.org/wiki/WordPress>

⁵³<https://en.wikipedia.org/wiki/Tumblr>

⁵⁴<http://codekata.com>

attendees and facilitates their learning. Attendees train their skills with standardized exercises called “kata”. lernOS uses a catalogue of katas to train skills related learning and knowledge. Katas can be practiced in a lernOS Circle or in separate events and workshops. See appendix for a collection of lernOS Katas.

lernOS Memex - Get Things Out Of Your Head And In A System You Trust

Everything you define or agree upon should be documented in a system you trust. This is not for bureaucracy reasons but to keep your head free for creative knowledge work. You can use any personal notebook (paper-based or digital) as lernOS Memex.

If you do not have any tool at hand, you can download and use the TiddlyWiki-Version of lernOS Memex⁵⁵ which is structured by the basic lernOS elements by default. This version is based on TiddlyWiki⁵⁶, a personal wiki that lives in a single HTML file:

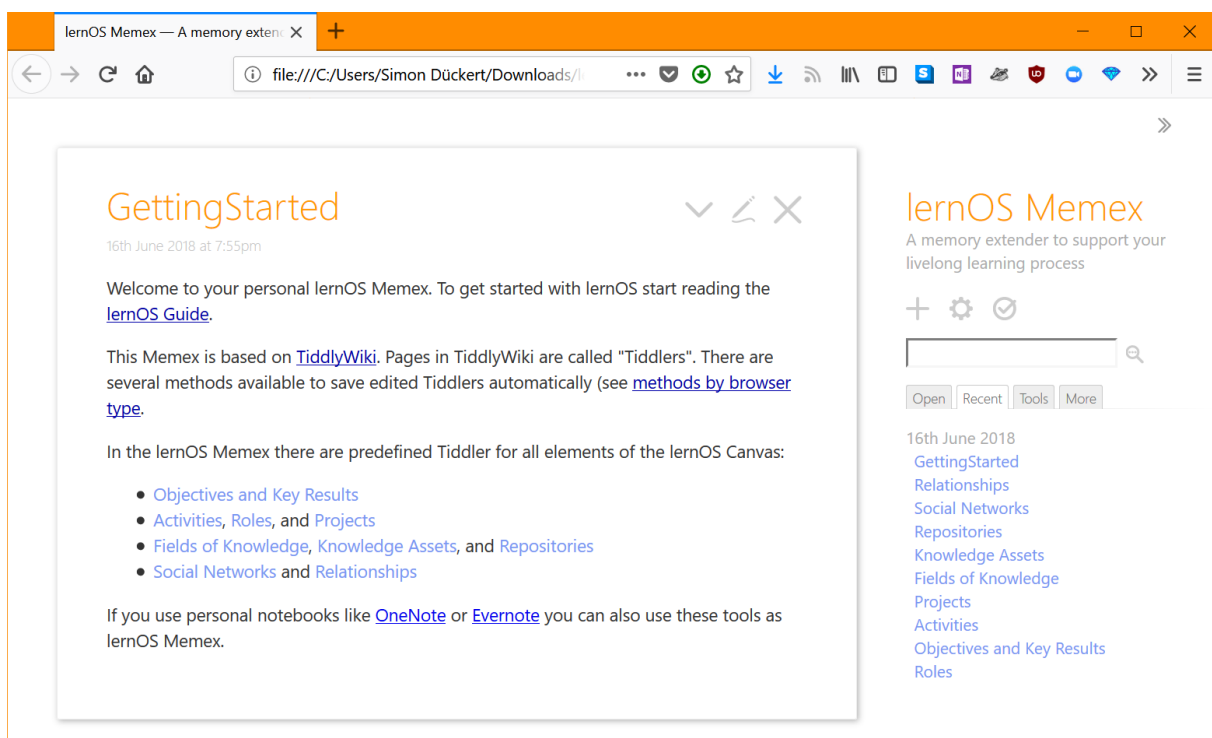


Figure 3: Screenshot Frontpage TiddlyWiki-version of the lernOS Memex

⁵⁵<https://github.com/simondueckert/lernos/blob/master/lernOS%20Memex%20-%20en/lernOS-Memex.html>

⁵⁶<https://tiddlywiki.com/>

Appendix: lernOS Katas

Kata: Why Are You Here?

What is your motivation for using lernOS or being part of a lernOS Circle? Too often we try to change things by start using new methods and tools but the WHY stays unclear. Like Simon Sinek put it in his TEDx Talk How Great Leaders Inspire Action⁵⁷ with the “Golden Circle”: we should start with WHY and then think about the HOW and the WHAT.

- [] **Exercise:** Think and talk about why you want to practice lernOS and/or why you joined a Circle.

Kata: My Objective(s) For The Next 12 weeks

What are you trying to accomplish in the next 12 weeks of the sprint? If you start using lernOS you should pick one objective that you real care about and you can make progress towards in the sprint. If you are an experienced practitioner you can choose up to five objectives per sprint.

According to the method Objective Key Results (OKR) you should define 2-5 key results per objective. You should be able to measure the key results on a scale from 0.0-1.0. To make sure that you choose yourself ambitious goals a grade of 0.7 is seen as success in OKR (see also With Goals, FAST beats SMART⁵⁸). OKR initiator John Doerr used that sentence template for the creation of OKRs:

I will as measured by..... .

- [] **Exercise:** Write down 1-4 ojectives and 2-5 key results per objective.

Kata: Working Alone Is Addition, Working Together Is Multiplication

Most of the tasks you have one yourlist, have be done by others successfully before. Most of the mistakes you might make, have been made in the past already. You can gain access to knowledge and experiences related to your objectives and avtivities by getting in touch with people inside and outside your organization in a systematic way.

To build strong relationships with people that matter you should not only market yourself and push information about yourself. You should also listen and relate contributions to information you have about others. Networking specialist Dale Carnegie⁵⁹ put it this way:

⁵⁷https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action

⁵⁸<https://sloanreview.mit.edu/article/with-goals-fast-beats-smart/>

⁵⁹https://en.wikipedia.org/wiki/Dale_Carnegie

You can make more friends in two months by becoming interested in other people than you can in two years by trying to get other people interested in you.

- [] **Exercise:** Create an overview of people related to your activities and objectives in a relationship list. Try to have a list of at least ten people. Entries in the list might be names (if you know people already) or roles like "Head of HR in company XY. You can use services like your Social Intranet/Enterprise Social Network, LinkedIn, Twitter, Xing, YouTube, SlideShare and ResearchGate to search for people you want in your network.

Note: If you use the lernOS Memex create the list in a separate page.

Kata: Strong And Weak Ties

An often quoted theory in social networking is The Strength of Weak Ties⁶⁰ by Mark Granovetter. According to that theory the strength of an interpersonal tie (a relationship to another person) can be defined by the amount of time spent together, the emotional intensity, the level of intimacy and trust, and the reciprocal services (helping each other) which characterize the tie.

According to Granovetter an interpersonal tie⁶¹ comes in three varieties:

1. **Strong** (you regularly interact, meet, help each other)
2. **Weak** (you are somehow connected, you had interactions in the past)
3. **Absent** (you don't know each other)

- [] **Exercise:** Take your relationship list from kata "Working Alone Is Addition, Working Together Is Multiplication" and grade every relationship as 1 (strong), 2 (weak), or 3 (absent) to get an idea which relationships should be deepened in the future.

Kata: Your First Sharing Experience

A common word of mouth says "sharing is caring". So when you invest time and effort in sharing your knowledge and knowledge assets (documents, images, videos etc.) your relationships deepen by every contribution you make and the people in your network are more willing to support you with your objectives as well. With regard to knowledge in contrast to physical objects or money there is one big advantage:

Knowledge is the only Resource that Increases through Use!

⁶⁰<http://www.cs.umd.edu/~golbeck/INST633o/granovetterTies.pdf>

⁶¹https://en.wikipedia.org/wiki/Interpersonal_ties

So if you share your knowledge you still have it and others have it aswell. In the Mozilla Web Literacy Framework⁶² Sharing is defined as Giving others access to files or digital content in an online space while respecting copyright and licenses. So if you share assets you have to be aware of legal issues like data protection (if you want to share assets of your organization), copyright issues and license issues.

- [] **Exercise:** Think about experiences and knowledge assets that you have and that you are willing to share. The go through your relationship list and choose one person that might like your contribution. Choose an appropriate channel (e.g. private in e-mail, semi-private in an enterprise social netowrk or public on twitter) and share your knowledge!

Note: If you use the lernOS Memex or the lernOS Canvas you can use this exercise as a starting point for “My Fields of Knowledge” and “My Knowledge Assets”.

Kata: A Letter To Your Future Self

The letter to your future self is a classic method in self motivation. You reflect on your current situation and give your future self an advice. You write it down as a letter, address it to yourself and open it in the future. You can use a paper letter or services like futureme.org⁶³ that will send you the letter as e-mail in the future:

How to write your letter to your future self (see also tutorial on wikiHow.com⁶⁴):

- Talking about who you are now (age, summary, fears, key values, beliefs, skills, abilities, goals, hopes
- Addressing your future self (things you want to stop/continue/start doing, give yourself advice, ask yourself questions
- Seal the letter ans store it in a safe place or use technology to send it to you in the future
- [] **Exercise:** Create your letter to your future self and send it to the future.

Note: If you use the lernOS Memex create a seperate page for the letter.

Kata: 25 Random Things About Me

If you apply to study at Fuqua Business School you have to write an essay with a list of 25 random things about yourself so the application team gets to know you better. When you write down facts about yourself you collect information that might help you in networking to make new connections

⁶²<https://learning.mozilla.org/en-US/web-literacy>

⁶³<https://futureme.org>

⁶⁴<https://m.wikihow.com/Write-a-Letter-to-Your-Future-Self>

based on similar interests and backgrounds (e.g. “We studied in the same place 20 years ago!”, see also New York Times Article⁶⁵). Random things about yourself might include:

- Life experiences
- Your likes/dislikes
- Where you were born/lived
- Family, kids, parents
- Schools, universities
- Workplaces in the past
- Career challenges
- Vacations
- Hobbies
- Achievements
- Fun facts
- Anything that helps to understand what makes you who YOU are
- [] **Exercise:** Start creating a list of 10 random things about yourself. Read the Fuqua 25 random things do’s and dont’s⁶⁶. Then expand the list to 25 things.

Note: If you use the lernOS Memex create the list in a seperate page.

⁶⁵<https://www.nytimes.com/2009/02/05/fashion/05things.html>

⁶⁶<https://stratusadmissionscounseling.com/duke-fuqua-25-random-things-dos-donts/>