



Digital Natives' learning expectations in Higher Education

Portrait of a generation by itself

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EUNIS 2019

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Fachhochschule Westschweiz

University of Applied Sciences
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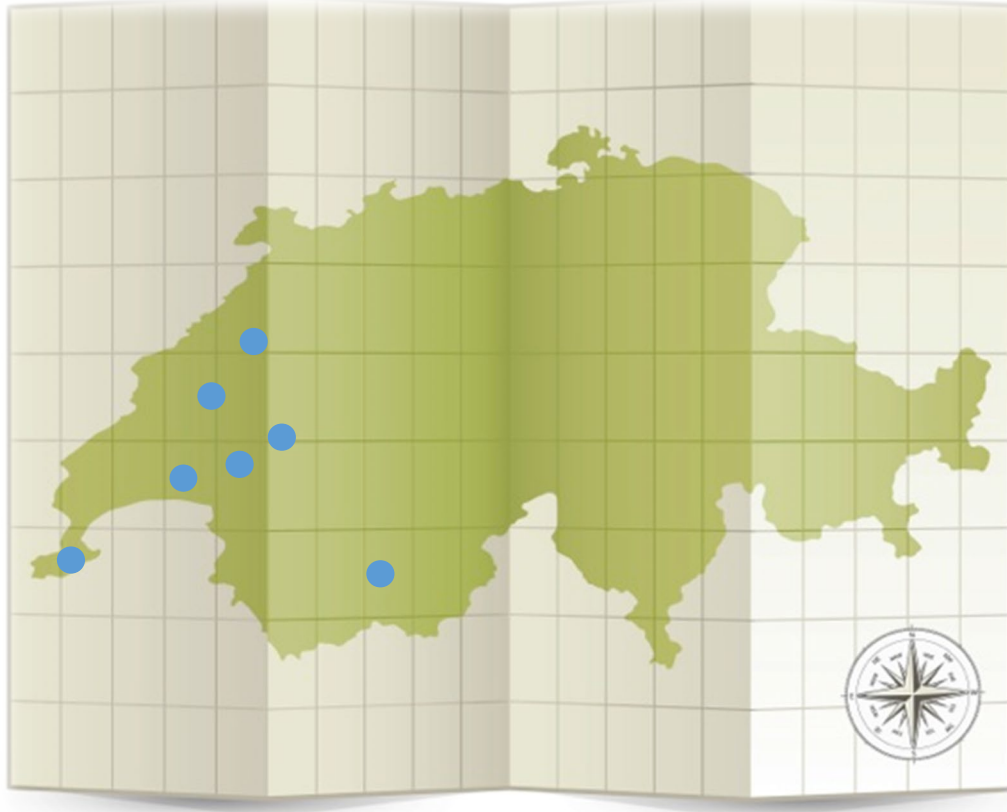
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Digital Natives' learning expectations

HES-SO



2nd biggest uni in CH
21'000 students
28 schools

6 domains (Design and Fine Arts; Business, Management and Services; Engineering and Architecture; Music and Performing Arts; Health; Social Work)

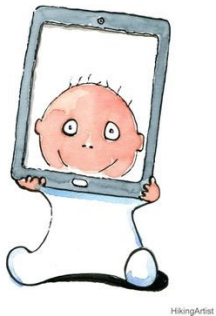
46 BA programs
20 MA programs

e-learning center HES-SO Cyberlearn
14 persons, 9 full time

NetGen

Millennials

Digital Natives



Born digital

Y Z Gen

Digital Natives' learning expectations

Characteristics



- Use technology as a natural part of their lives
- Hedonist
- Live in present
- Need various activities
- Short attention span
- Preponderance of visual (video, picture, etc.)
- Consider professor as part of the teaching/learning process, not the center, want other contributions than professor's
- Professor has the role of facilitator
- Zapper, gamer
- Cooperation work
- Communication and peer exchanges are center of their lives
- Pragmatic
- Need meaning and pleasure in work
- Need to be valorized through constructive feedbacks
- Co-expert and content producer

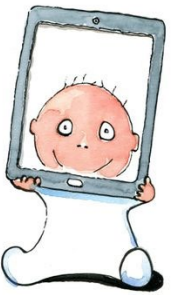
Digital Natives' learning expectations

Topics

What are the habits of students in Internet, social media, mobile?

As digital natives, what do they suggest to improve our resources and methods?

How would they design their « ideal course »?



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Digital Natives' learning expectations

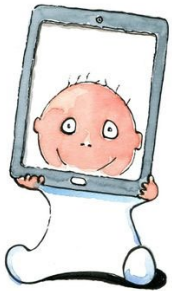
Frame

1 survey

30 questions : 20 closed and 10 open questions
conducted in 2013 and 2016

through HES-SO Moodle platform

to compare the evolution of the profile of these students



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Digital Natives' learning expectations

Methodology



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May 2013 :

Duration	2 weeks
Population (Moodle)	17'430
Confidence level	95%
Margin of error	5%
Sample	376
Responses	800

May 2016 :

Duration	4 weeks
Population (Moodle)	19'385
Confidence level	95%
Margin of error	5%
Sample	376
Responses	387

z test to compare both groups

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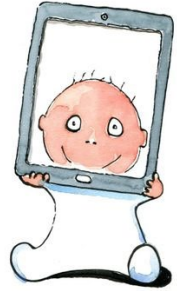
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Digital Natives' learning expectations

Results



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2013

Women	54.6%
Men	45.38%

Less	0%
18-25 y	80.13%
26-35	15.75%
more	4.12%

Bachelor	83.13%
Master	07.88%
Other	2.99%

2016

54.6%	Women
45.38%	Men

Less	0.26%
18-25 y	77.52%
26-35	17.31%
more	4.91%

54.6%	Women
45.38%	Men

no significant
statistical
difference (SSD)

Digital Natives' learning expectations

Devices

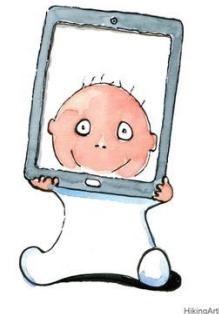
2013

Laptop	96.50%
Desktop	34.88%
Mobile phone	86.26%
Tablet	20.25%
e-reader	03.38%

2016

Laptop	93.80%
Desktop	36.69%
Mobile phone	96.89%
Tablet	36.43%
e-reader	08.53%

SSD for mobiles devices and desktops



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Digital Natives' learning expectations

Tech use

2013



2016

Access to Internet during course : 84.5%

Access to Internet during course : 93.3%

Multitasking	33.14%
Check professors' data	34.20%
Supplementing professors' data	57.84%
Boring	37.43%
(Multiple choice)	

Multitasking	44.60%
Check professors' data	37.12%
Supplementing professors' data	57.84%
Boring	42.38%
(Multiple choice)	

SSD for check and supplementig profs data and multitasking

Digital Natives' learning expectations

Tech use

2013



: 75.75%

2016

Use their smartphone during the courses
for personal purposes : 89.41%

Use their smartphone during the courses
for personal purposes

Browse Internet	33.99%
Checks mails	76.73%
Instant messaging	64.03%
Post on Social medias	46.20%

(Multiple choice)

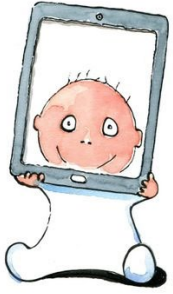
Browse Internet	42.61%
Check mails	71.88%
Instant messaging	84.35%
Post on social medias	47.83%

(Multiple choice)

SSD for Browse Internet and Instant messagin

Digital Natives' learning expectations

Preferred Educational resources



2013

Videos	54.88%
Simulations	47.13%
Quizzes	46.25%
Videos Courses	40.50%

(Multiple choice)

2016

Video	59.69%
Quizzes	51.42%
Simulations	50.39%
Videos Courses	44.19%

(Multiple choice)

SSD for video media (combining video+video courses)

Digital Natives' learning expectations

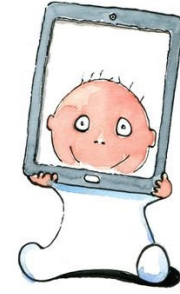
Way of teaching

2013

Interesting	74.13%
Efficient	15.63%
Modern	21.13%

(Multiple choice)

2016



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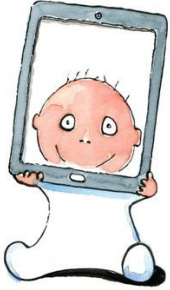
Interesting	65.89%
Efficient	09.82%
Modern	16.54%

(Multiple choice)

SSD for interesting and efficient : **diminution**

Digital Natives' learning expectations

Best learning ways



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2013

Graphs and explanatory videos	69.50%
Note taking	61.13%
Listen to the professor	53.25%
Reading summaries	48.63%
Explain to classmates	44.13%
(Multiple choice)	

2016

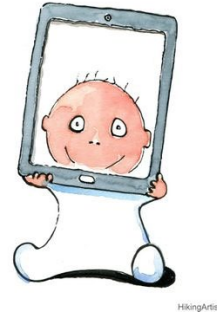
Graphs and explanatory videos	72.35%
Note taking	51.94%
Explain to classmates	50.39%
Reading summaries	50.13%
Listen to professor	48.84%
(Multiple choice)	

SSD for Note taking (diminution)

Digital Natives' learning expectations

Preferred pedagogical models

2013



2016

Lectures followed by exercises	55.63%
Workshop courses	46.63%
Lectures	23.00%
Flipped class	18.63%

(Multiple choice)

Workshop courses	48.58%
Lectures followed by exercises	47.55%
Lectures	22.74%
Flipped class	21.45%

(Multiple choice)

SSD for lectures, lectures followed by exercises (diminution)

Digital Natives' learning expectations

Ideal course design

2013

55% of the participants provided detailed propositions (several lines) for a total of 549 descriptions

(open question)

2016

68.6% of the participants provided detailed propositions (several lines) for a total of 159 descriptions

(open question)



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Digital Natives' learning expectations

Statements

“As a reminder, a course must be prepared and teachers must think about changing techniques every 7 minutes, students' attention drops at this rate.”

Short attention span
Zapper, gamer

“I love when professors show us other opinions, such as TED videos”

Consider professor as
part of the teaching

« A course where technology is used to increase interactivity »

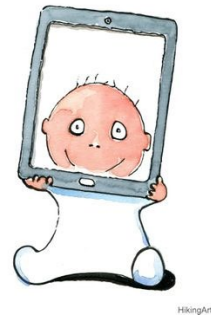
Cooperation work



Digital Natives' learning expectations

Ideal course

2013



2016



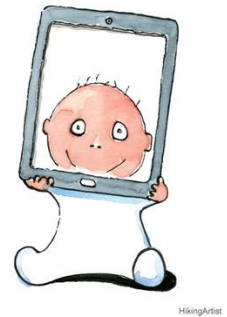
Digital Natives' learning expectations

Evolution of concerns

keywords regrouped into six categories:

Professor
Exchange
Resource
Method
Model
Organization

ex. main keyword in resp 1 : video
category : resource



Digital Natives' learning expectations

Pedagogical categories

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Course design

professor

organisation

resource

method

exchange

model



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Course design

professor

organisation

resource

method

exchange

model

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Digital Natives' learning expectations

Conclusions

Four actions :

Operational level

1. Develop a Moodle plugin : e-voting : over 100 unis have deployed it
 - Increase interactions between students and prof in large audience courses
 - Integrate such a tool in the Moodle environment to ease prof's work
2. Moocise the Moodle platform to host our Moocs :
<https://moocs.hes-so.ch>
3. Develop a customizable quiz system

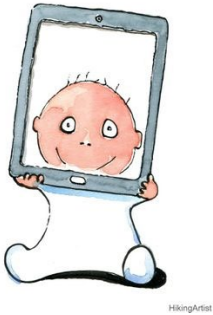


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Digital Natives' learning expectations

Conclusions

Institutional level



Launch a wide operation to **train the whole institution in 5 years** to address the **digitalization** of the university and society.

Objective : strengthen digital skills by developing a mixed education program by addressing three issues :

- Comprehend the change of model,
- Understand the issues and challenge of technologies,
- Make professions evolve according to the challenge of digitalization

E-learning center HES-SO Cyberlearn

Get in touch with us



New Tools for New Students

Contacts

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