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Information Literacy and digital inclusion for all: a pilot study

Simão Elias Lomba
lomba@campus.ul.pt

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LISBOA | UNIVERSIDADE DE LISBOA

ie Instituto de Educação

Summary

- Problem: IL in today's schools

- Curricular integration before high school

- IL and digital inclusion at schools

- Guided inquiry → IL & digital inclusion

- Librarians and teachers should work together

- First results from a pilot study

Information Literacy Importance

Information Literacy

- Is extremely important

- Relates positively to academic achievement and work performance.

Students in higher education struggle when they need to do their information research assignments.

At lower levels of education, information literacy studies are less frequent but they aren't less important.
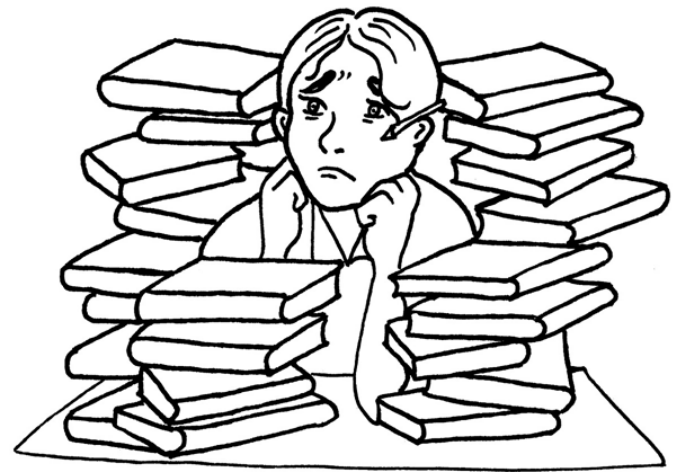
Effectiveness Problem

School librarians are in charge of helping students with information literacy issues, but students don't ask for help and some schools might not have fully qualified librarians.

Research Assignments

Teachers ask students for research assignments. They expect that students will find proper sources of information and make good use of information they find in these sources. But in most cases students don't know how to do that.

Usually students learn about information literacy only at the university but many students have left the educational system before university.

Digital Natives Are a Myth

(see Bennett, Maton, & Kervin, 2008)

Most of the students who were born within the digital technology age have a lack of digital competences needed to learn in a digital environment and to be engaged actively in social citizenship, and in most cases they don't have opportunities to learn properly about these issues in their schools.

Digital Natives Are a Myth

(a) although many young people possess various technological devices, they use them mainly for recreational activities and word processing;

(b) there are big differences among young people who allegedly belong to this generation of "digital natives", the equipment they have, and how they use such equipment that are conditioned by family contexts.

(Bennett, Maton, & Kervin, 2008)
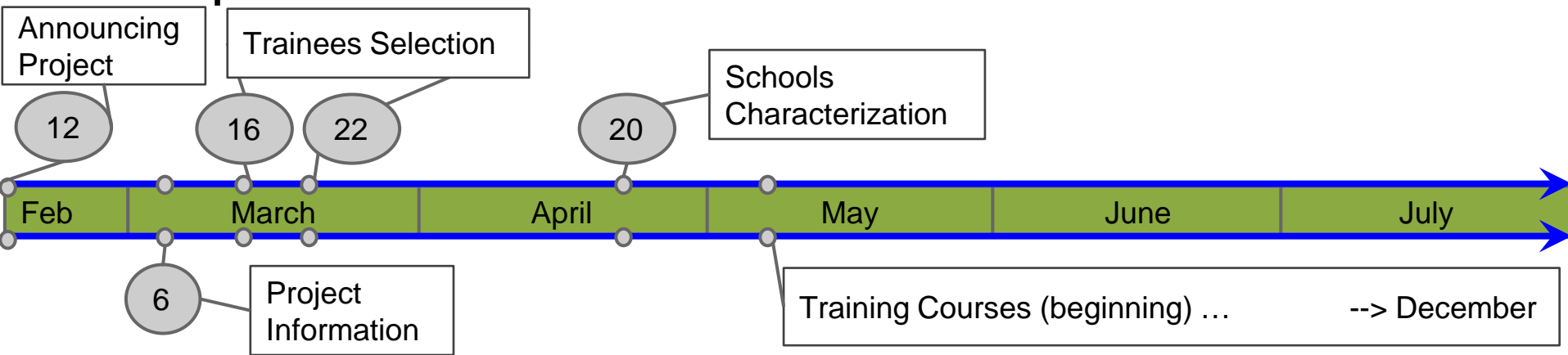
Digital Natives Are a Myth

Bennett, Maton, and Kervin (2008) claim that, despite common sense statements identified by proponents of the idea of the new generation of "digital natives", there is no evidence to support the idea of multitasking as a unique new phenomenon of "digital natives".

Moreover they refer based on studies related with the theory of cognitive load, multitasking can cause loss of concentration and cognitive overload, which have a negative effect on learning.

(see Bennett, Maton, & Kervin, 2008)

Information Literacy Instruction Program (ILIP)

- We are testing an ILIP based on the Information Seek Process (Kuhlthau, 2004) and on Guided Inquiry (Kuhlthau, Maniotes, Caspari, 2007, 2012).

- In a training course, teachers experience the method, next they plan the ILIP, and finally they implement it with school librarians.
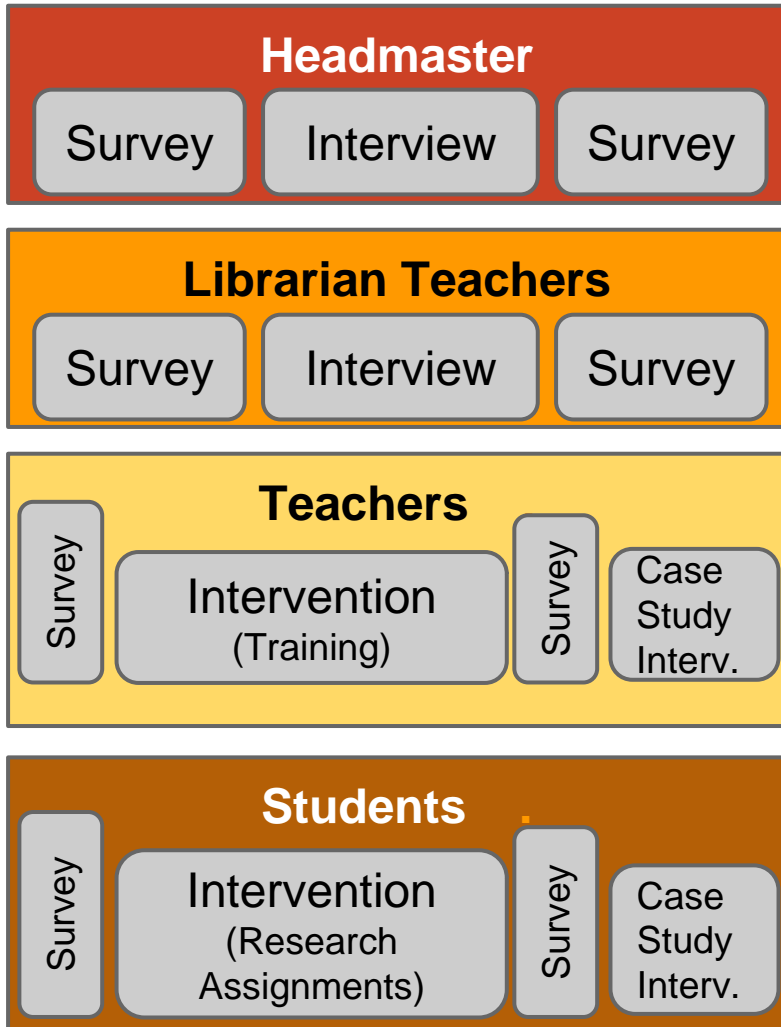
Announcing Project

Trainees Selection
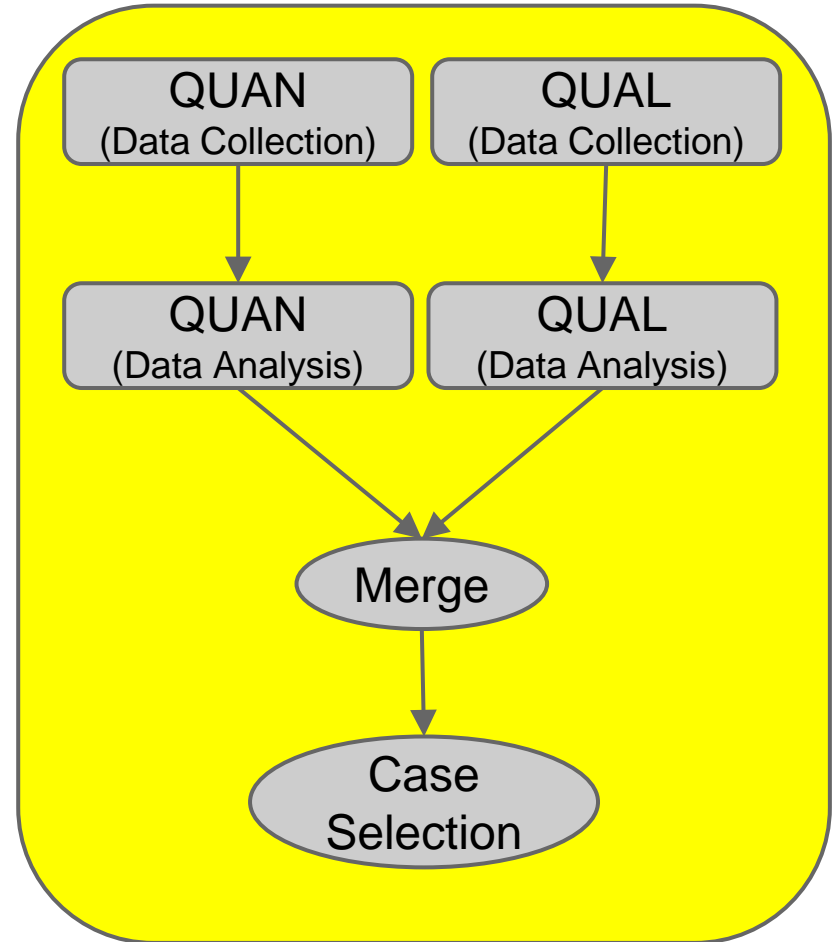
Schools Characterization

12		16	22		20	
Feb		March		April	May	June	July

6

Project Information

Training Courses (beginning) …   --> December

LIMA Project

13 School Clusters

from Loures and
Odivelas,
2 administrative regions
from the Lisbon District

Method

Headmaster
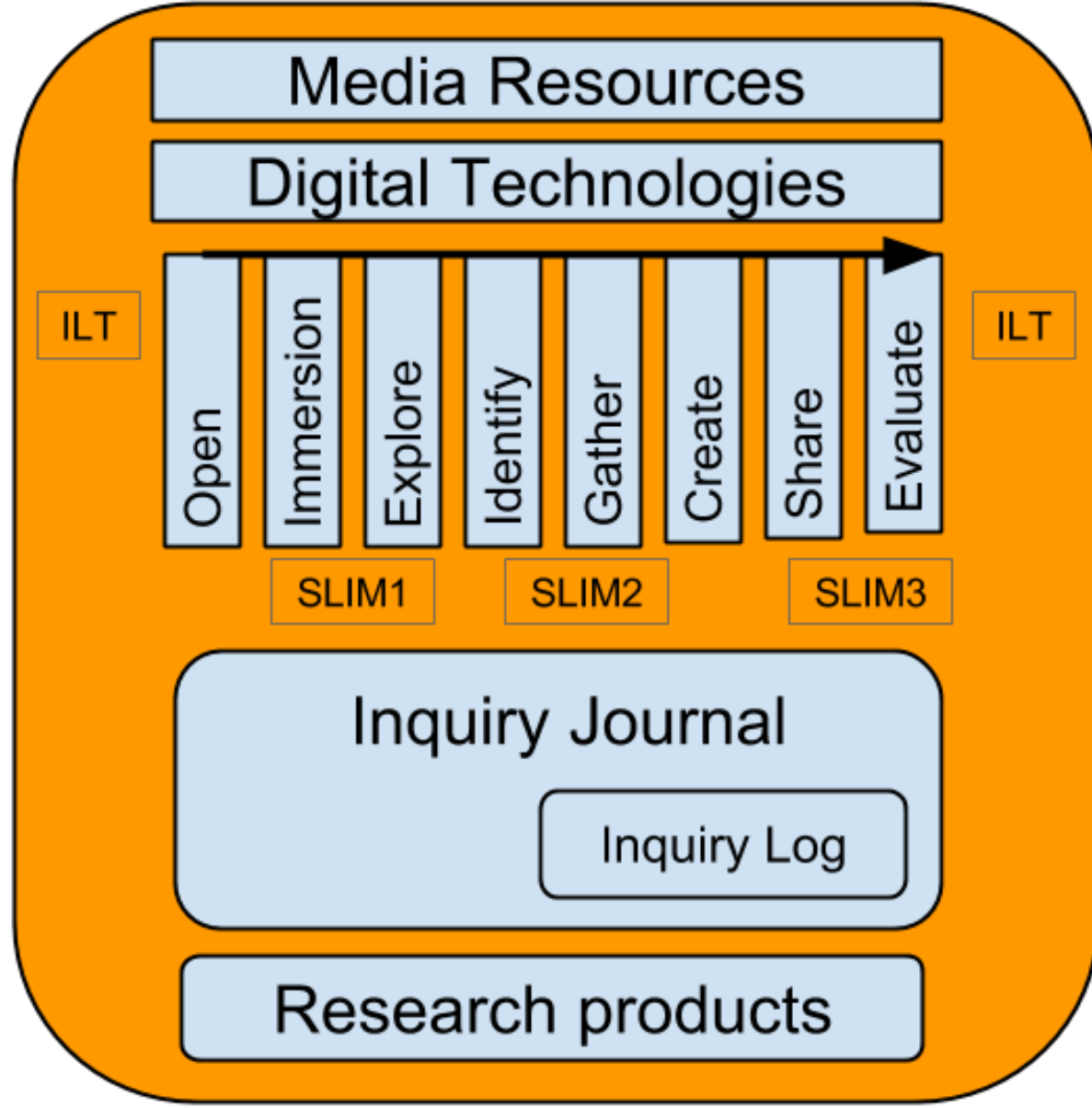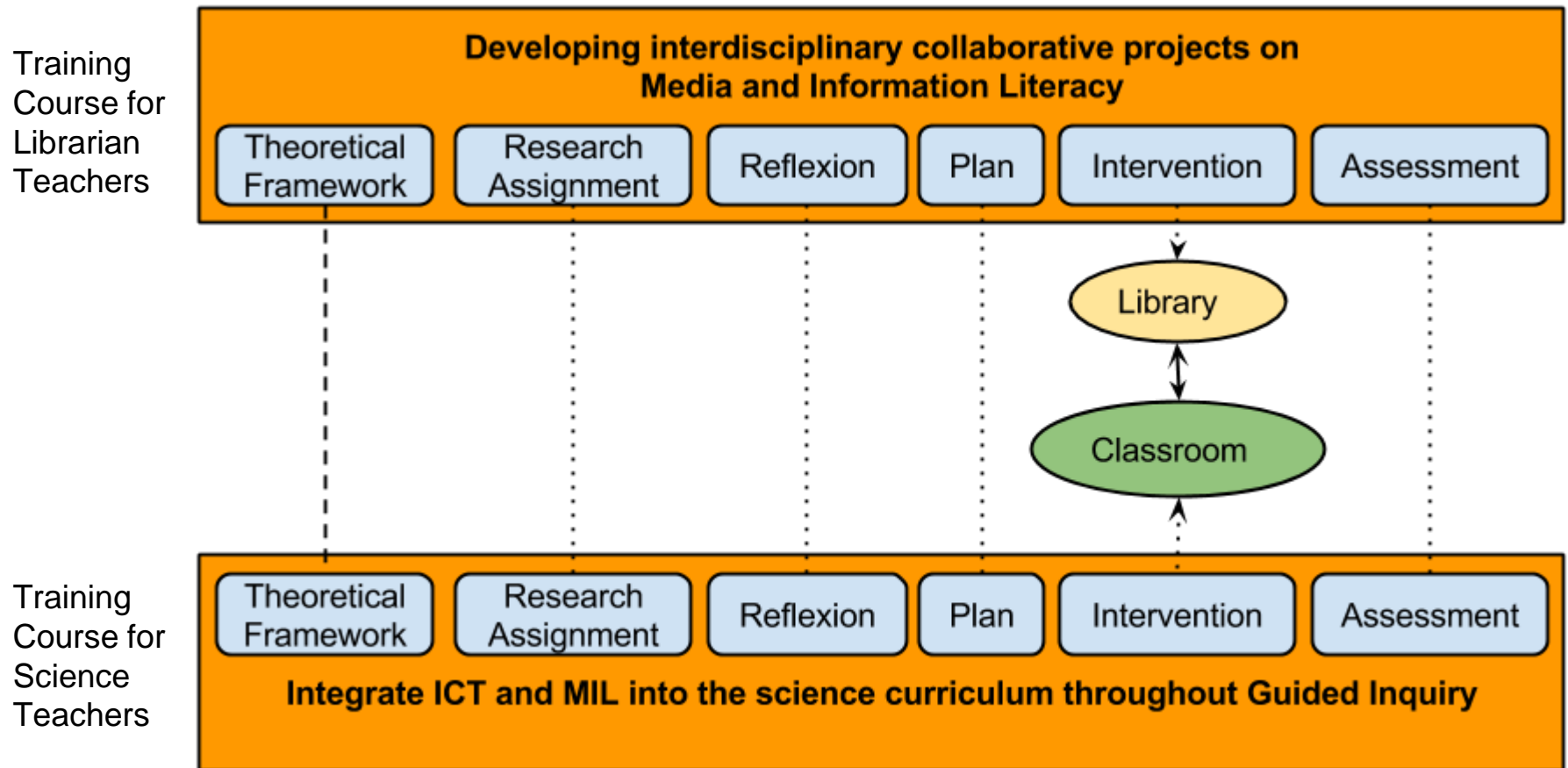| Survey | Interview | Survey |

Librarian Teachers
| Survey | Interview | Survey |

Teachers
| Survey | Intervention (Training) | Survey | Case Study Interv. |

Students
| Survey | Intervention (Research Assignments) | Survey | Case Study Interv. |

Mixed Method Research

QUAN (Data Collection) → QUAN (Data Analysis)

QUAL (Data Collection) → QUAL (Data Analysis)

Merge

Case Selection

Convergent Research

Method

Training Course

Contacts	Candidates	Enroll	Training	Case Study Interviews
13 Headmasters	(21 teachers) 11 Teachers 11 Librarian Teachers	5 Teachers 5 Librarian Teachers	2 Trainers ● Science ● IL & ICT	Headmasters Teachers Librarian Teachers Students

Training Course for Librarian Teachers

Developing interdisciplinary collaborative projects on Media and Information Literacy

Theoretical Framework | Research Assignment | Reflexion | Plan | Intervention | Assessment

Library

Classroom

Training Course for Science Teachers

Theoretical Framework | Research Assignment | Reflexion | Plan | Intervention | Assessment

Integrate ICT and MIL into the science curriculum throughout Guided Inquiry

Training Course

Teachers and School Librarians have worked together in the training course and at their school with the same students. They will integrate Information Literacy and digital technologies into the curriculum.

Teachers and School Librarians should make "reflections in action" and "reflections on action" in order to improve their professional development.

Students' Research Assignments
Teachers' Perceptions

- The Copy / Paste Problem,

- Research assignment = Google + Wikipedia

- Sources problem

- A teacher wrote that sometimes when she has a lot of bad assignments, she has a feeling of failure, she makes a soft evaluation, and she tries to improve her method.

Students' Research Assignments
Librarian Teachers' Perceptions

Main ideas

"... pupils' ideas are much too generic about what and where to search… it is unusual for teachers to provide concrete information sources"

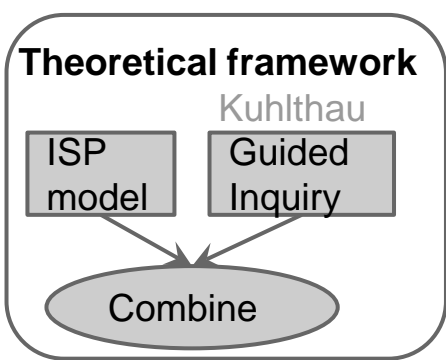"The collaboration between the library and the other teachers is generally reduced..."

(Excerpts of reflections from trainees, translated from Portuguese)

Curricular Integration

Curricular integration of technologies is not an option because technologies have been there all along.

Curricular integration of digital technologies is simply a matter of being updated.

Information Literacy and digital technologies should be learned together and should be integrated into the curriculum, and teachers and librarians should work together to achieve this.
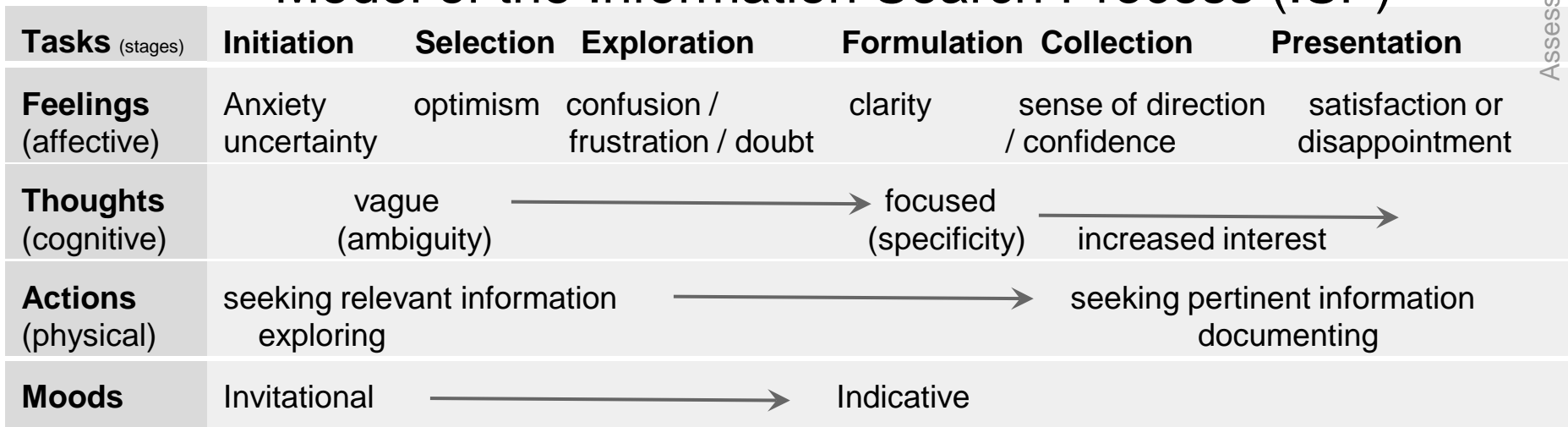
Information Search Process (ISP)

Theoretical framework

Kuhlthau

ISP model → Combine ← Guided Inquiry

ıs based on *feelings*, *thoughts* and *actions* and assumes that dealing with information is a difficult and complex process that **assumes user anxiety** and **incorporates uncertainty in the ISP**.

Main contributions to the ISP model

Dewey	**Kelly** (*)	**Bruner**	**Taylor** - Levels of Need (*)	**Affective** (Feelings / Mood)
Suggestion	Confusion and doubt	Perception	Visceral - Q1	
Intellectualization	Mounting confusion and possible threat	Selection	Conscious - Q2	**Cognitive** (Thoughts)
Guiding idea	Tentative hypothesis	Inference	Formal - Q3	
Reasoning	Testing and assessing	Prediction	Compromised - Q4	**Physical** (Actions)
Action	Reconstructing	Action		

Model of the Information Search Process (ISP)

Tasks (stages)	Initiation	Selection	Exploration	Formulation	Collection	Presentation
Feelings (affective)	Anxiety uncertainty	optimism	confusion / frustration / doubt	clarity	sense of direction / confidence	satisfaction or disappointment
Thoughts (cognitive)	vague (ambiguity) →			focused (specificity)	increased interest →	
Actions (physical)	seeking relevant information exploring →				seeking pertinent information documenting	
Moods	Invitational →			Indicative		

(adapted from Kuhlthau, 2004, p. 82 and Thomas, Crow & Franklin, 2011, p.38)

Zones of Intervention	Levels of Mediation	Levels of Education	Intervention
Z1	Organizer	Organizer	Self-service
Z2	Locator	Lecturer	Single source
Z3	Identifier	Instructor	Group of sources
Z4	Advisor	Tutor	Sequence of sources
Z5	Counselor	Counselor	Process Intervention

Strategies	Collaborating	Continuing	Choosing	Charting	Conversing	Composing

Abilities	Recall	Summarize	Paraphrase	Extend

(Kuhlthau, 2004)

Guided Inquiry

- It is designed to ensure that students have the sustained guidance they need throughout the Inquiry Process.

- **Goal**: "Make a student's vague unformed, sometimes mistaken thinking into a clear, deep personal understanding."

- It applies a concepts approach to IL rather than a skills approach.

- Flexible team approach (core team: three members, including librarian).

- **Third space:** "is where the students' world and the curriculum meet." Kuhlthau, Maniotes, Caspari (2007, 2012)

Inquiry Tools

Google Drive

- Docs
- Presentations
- Forms,
- Draw,
- ...

Learning Team meetings

Inquiry Circles

Google Sites
(using page templates)

Rubrics

...

Inquiry Journal

Stop and jot
Paired share protocol
Exit card (entries)

ideas
reflections
note taking
feelings

Inquiry Log
(track sources)

Chart

Inquiry Tools

Curricular Integration

- Integrating Information Literacy into the curriculum at middle schools and high schools is very important to develop strong Information Literacy skills in students.

- Information Literacy and digital technologies should be learned together and should be integrated into the curriculum and teachers and librarians should work together to do this.

Collaboration

- Teachers are not used to collaborating together, especially among different curriculum subject areas.

- Sharing reflection in the training course has been very appreciated by teachers.

"... this reflection with colleagues may also allow for the search for joint solutions … sharing experiences and ideas is very positive"

(Excerpt of a written reflection from a trainee, 2nd training session, translated from Portuguese)

Collaboration

- Getting teachers and school librarians to work together in a training course is a good way to start a program of Information Literacy at schools.

- If teachers and librarian teachers try the benefits of collaboration, they will keep that habit and it is likely to encourage students to collaborate.

Conclusions

- Teachers who are attending the training course are very engaged working together.

- If the goals of the training course are reached, then the curricular integration of Information Literacy and digital inclusion will be a reality.

- In this case, if we use this method in all schools we will achieve Information Literacy and digital inclusion for all.

Information Literacy and digital inclusion for all:
a pilot study

Thank you!
Questions?
Remarks?

Simão Lomba
lomba@campus.ul.pt

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