Comparative analysis of the information literacy competencies of undergraduate students in the Humanities: the competencies gap

Anna Maria Tammaro, University of Parma, Italy

Introduction and Background

NAVIGATE (09/2017-08/2020) is a project funded by Erasmus+ program under Key Activity 2 - Strategic partnership for innovation and the exchange of good practices. The project is focused on Higher Education (HE) undergraduate students in Humanities as major target to be capable to recognise the widespread phenomenon of fake content and news.

In the first phase a survey has been administered in the three partner countries: Italy, Bulgaria and Sweden between December 2017 and January 2018. The survey aimed to investigate the impact of technology on students' learning and the intensity of their use of mobile devices. The main objective has been to make a comparative analysis of the similarity in the behaviour and attitudes to learning of the digital natives generation arriving at HE institutions, for designing the second phase milestones (a competency tree and the outcomes of the games-based learning).

Learning styles

The survey aimed to investigate the impact of technologies on how students learn. It is not surprising that the learners from all three universities own and use different devices to connect to the Internet, in particular to search for information and to read. However, in all three HE institutions, the students highlight that their use of technology for learning is limited. The laptop is the preferred tool for reading and searching for information (47% in Bulgaria, 99% in Sweden and 33% in Italy). The least used tool is the desktop (28% in Bulgaria, 26% in Sweden and 30% in Italy). The mobile devices are less used for learning: smartphone (35% in Bulgaria, 26% in Sweden and 30% in Italy) followed by the tablet (10% in Bulgaria, 25% in Sweden and 25% in Italy).

Therefore the use of mobile devices is widespread, but not for learning. To confirm the evidence that students do not use mobile devices to study, the survey asked a specific question about games and learning through games. The majority do not use games for learning (except 36% in Bulgaria, 12% in Sweden and 29% in Italy using games).

Also the students of the three universities have similar habits with regard to the place and the way they study. Where do they study/learn? Over 94% in Sweden, 70% in Bulgaria and 79% in Italy say that they study at home with books and via internet.

However, the behaviors differ as regards the use of the library in the three HE institutions. The library (in university and others) in the everyday life of contemporary students is widespread in Sweden (24%) but not in Bulgaria (6%) and in Italy (9%). There are also differences in the use of the library: in Bulgaria the learners search in e-databases (46.7%) and in periodicals and proceedings (29.9%); in Italy the library is mainly used by the students to lend or order books (34%), to search in the OPAC (often 24% or sometimes 18%), to ask

the librarian for information (27%); rarely they go to search in databases (19%); in Sweden the learners search in the OPAC (50%), ask for information (18%), order and reserve articles, search in databases (42%).

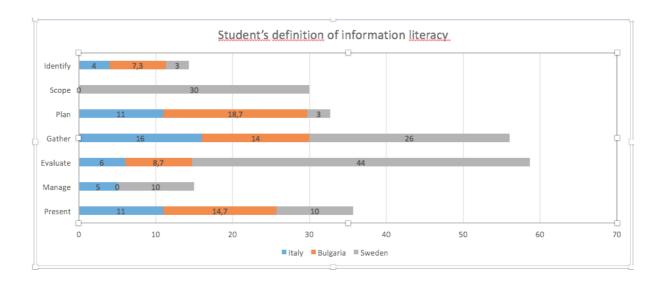
Definitions

At present the three partner universities have different methodologies and approaches to teaching Information Literacy (IL) competencies. While in Bulgaria the IL concepts are integrated in different courses within the curriculum, in Italy and Sweden the library offers not mandatory courses related to online resources and information retrieval. Students however arrive at the university with previous experience and knowledge and therefore should not be considered as totally ignorant. The survey asked the learners to define the concept of IL in order to understand if they are actually literate when they enter the university.

Information literacy

The analysis - via classification of the students written statements for this open question how do they understand IL as definition/concept – was done with the Framework SCONUL Seven Pillars of Information Literacy (2011).

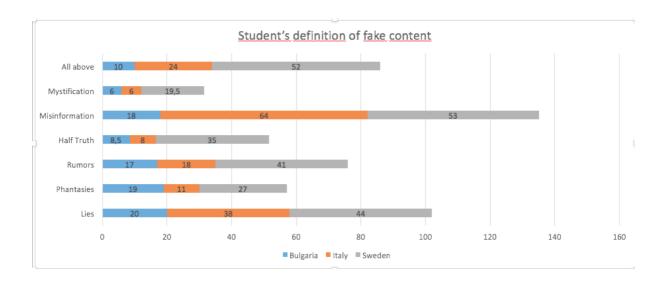
Most of students (16% in Italy, 14% in Bulgaria and 26% in Sweden) define information literacy as the ability to gather information online and to know how to evaluate it (6% in Italy, 9% in Bulgaria and 44% in Sweden). Few students are aware of the importance of knowing how to present and create content (11% in Italy, 15% in Bulgaria and 10% Sweden). Only students in Sweden recognize the importance of starting from the scope (30%). All the students of the three universities are unaware of the preliminary identification and planning phases and of the important information management phase.



Fake content

In the last years the notions of fake news and fake content have become crucial in the determination of the IL competencies of the population. With the survey we have investigated how HE students would define "fake news".

Similarly, in the three universities the majority of students understand the concept as misinformation (18% in Bulgaria, 64% in Italy and 53% in Sweden). Many learners perceive fake news as lies (20% in Bulgaria, 38% in Italy and 44% in Sweden) or half-truth (8,5% in Bulgaria, 8% in Italy and 35% in Sweden). Other concepts include rumors, mystification, phantasies and all the meanings.



Students' competencies Gap

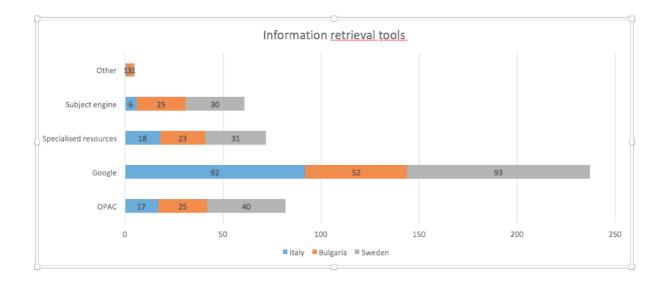
The results of this NAVIGATE monitoring process have showed the existence of a gap between reality and self-perception in HE students, especially with regard to their awareness of IL competencies. Furthermore, the survey has evidenced that the themes of IL and Digital competencies intersect and sometimes overlap. Concerning the methodology of understanding the digital competencies of the students the Europass Digital competence self-assessment form has been applied. An analysis of the results of the Europass questionnaire was elaborated and presented at EDULEARN 2018 conference. This analysis showed that in the three universities students perceive themselves as autonomous users who know the technologies they use.

In this summary we focus on the overlap of IL and digital competencies. Quite obviously, IL competencies such as Search strategy, Citing and references and Quality of information commit with some Digital competencies such as Information processing, Content creation and Communication.

Search strategy

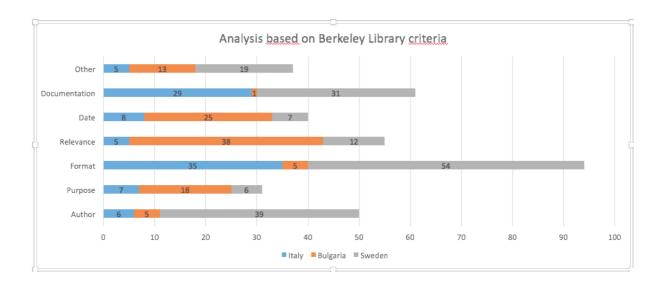
The analysis of the data shows that the students, despite the everyday use of a computer or a smart device, have only basic skills in Information processing related to Search strategy. Almost all learners start searching from Google (92% in Italy, 52% in Bulgaria and 93% in Sweden). Some use the OPAC (17% in Italy, 25% in Bulgaria and 40% in Sweden) but not the specialized resources made available by the library (18% in Italy, 23% in Bulgaria and 31% in Sweden). Subject engines are less used (6% in Italy, 25% in Bulgaria and 30% in

Sweden). As the students cannot use multiple sources to retrieve information, they are satisfied with a research that uses generic tools and is not specific to different subjects.



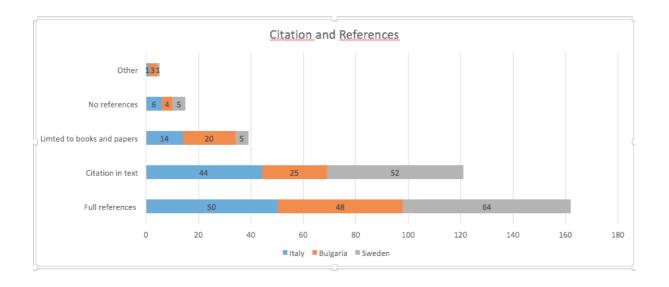
Quality of information

To analyze information quality criteria, we used the Berkeley Library criteria. While the first criterion for the students from Sweden (54%) and Italy (35%) is the format of the resource, for the students in Bulgaria (38%) it is the relevance to the research. Author of the source is considered important only in Sweden (39%), not in Italy and Bulgaria. The documentation is instead considered important in Italy (29%) and Sweden (31%) but not in Bulgaria (1%). Date is relevant only in Bulgaria (25%), not in Italy (8%) and Sweden (7%). This competence reveals greater differences between students than the competence of knowing how to search for information. The students evidently rely on previous individual experiences that they consider valid also for the university context.



Citation and references

Information literacy includes ethical and behavioral skills such as knowing the copyright and knowing how to cite the resources that are used to learn. All students must know how to avoid plagiarism and use the information correctly. The survey reveals that the majority of students of the three universities are aware of this (50% in Italy, 48% in Bulgaria, 64% in Sweden) and also cite correctly in text (44% in Italy, 25% in Bulgaria and 52% in Sweden). Some students limit references only to book and journal papers: in Italy (14%) and in Bulgaria (20%) but this is not the case in Sweden. However, few believe that certain resources such as images do not need to be quoted (6% in Italy, 4% in Bulgaria and 5% in Sweden).



In conclusion from this brief summary we can point out that there are more similarities than differences between the students of the three universities as initial competencies with which they arrive at the university. The similarities show that there is a competencies gap in critical literacy, accompanied by a general overestimation of their ability to research, use and create information.

There are also differences due to both individual characteristics and the cultural contexts, indicating the need to provide different levels of training, which by copying the Europass model could be referred to as Base, Independent, Advanced.