

WP3 Define target audience expectations

Analysis and consolidation of surveys responses



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1. Executive summary

As stated in our project proposal, the AIRED project aims to prepare the current and next generation of educators and all those involved in the knowledge chain, to integrate artificial intelligence (AI) tools into their work while maintaining human creativity and ethical considerations and promoting evidence-based solutions for societal challenges in education, social justice, equity, and inclusion.

To achieve these goals and be able to create content to prepare educators to integrate AI in their work, Objective 1 of Work Package 3 was set: identify the current practices, fears and expectations of our education and training target audience in their AI uses. To this effect, an online survey was prepared by partners in English, French and Spanish and sent out in January 2025 to around 250 of their contacts, made up of 4 groups: the French respondents (35), the Irish ones (39), the Spanish group (98) and finally, a multi EU country group (25). It was answered anonymously by around 80% of the target audience, who sent back 197 completed surveys, above the objective of 150 responses established as indicator in our project proposal.

This report contains the results and analysis of said survey, which was presented as a Google Form with 4 sections:

SECTION 1 You and your role

Besides specifying the respondents' role within the educational field, this section compiled mostly quantitative demographic information (6 questions - 24 items).

SECTION 2 Perceptions of AI

This part comprises 7 questions that give us both qualitative and quantitative information on how often the respondents use AI, the degree to which they are interested in it, how they feel about it, awareness of AI terms and ethical issues in AI usage (7 questions -42 items).

• SECTION 3 Needs

This section includes 3 questions: how the respondents acquired the necessary knowledge to use AI tools, how often they use AI to perform educational tasks., and what other tasks they would like the AI for. (3 questions with 20 items).

SECTION 4 Expectations

Participants were asked about which type of support they would rather have to learn more about using AI in teaching/training/management and their expectations as regards the level of influence that AI tools could have in the improvement of a variety of educational activities (2 questions with 15 items).

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2. Introduction and context

The launch of ChatGPT in November 2022 proved a profound influence on the evolution of AI, which came into our lives and jobs in a pervasive way and has not stopped growing since, developing AI tools at a rate that is astonishing. In educational materials creation and in our classrooms, we see AI's impact is having in terms of:

- overreliance on the results provided by AI searches,
- risks of diminishing efforts in knowledge acquisition,
- exposure to increased pace of constant inputs and the difficulties of assimilation and a variety of ethical considerations,

to mention only a few. In contrast, AI also provides great advancement for learners and professionals alike allowing for:

- the potential of adaptive learning systems that can help tailor training needs and chatbots and virtual tutors that can accompany learners,
- Al powered Virtual or Augmented Reality that enhances learning,
- data analysis and reporting assistants that ease administrative tasks,

among many others. The capacity of AI to influence the educational field for the better or for the worse is enormous. To identify the current practices, fears and expectations and gain awareness of the state of AI usage and impact on education, we reached out via online surveys to different professionals in the training sector like training managers, public sector teachers, educational designers in adult training and producers of face-to-face or distance learning materials. Each project partner translated the survey and sent it to their respective contacts as shown below:

PROJECT PARTNER	COUNTRY	RESPONDENTS mostly from:	No. OF REPLIES
HAIKARA - ICN	FRANCE	FRANCE	35
ICEP Europe	IRELAND	IRELAND	39
AEG	SPAIN	SPAIN	98
AEG	SPAIN	GERMANY, GREECE, ITALY, NORWAY, PORTUGAL.	25

The total number of replies is **197**, above the initial 150 compromised in the project design. We are glad to have obtained this number since it increases feedback to shape the training materials that AIRED will provide in WP5 and WP6 in the format of an online platform freely available to all interested parties.

3. Survey results and analysis -FRANCE-

• SECTION 1 You and your role Questions 1-6

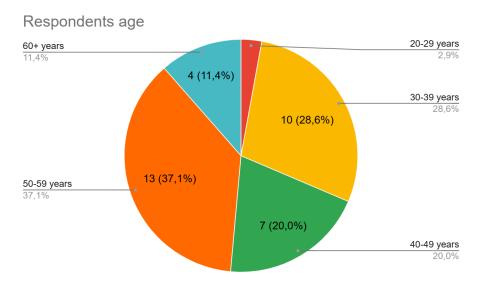
QUESTION 1 -9 items- Roles within the educational profession. As shown below, the majority of respondents in France are teachers-researchers in Universities and Higher Education institutions (65.7%) followed at a distance by digital learning professionals and instructional designers (14.2% and 11.4% respectively). Professional coaches and teachers working with special needs are the smallest groups (2.27%). The count exceeds the number of 35 respondents because it was possible to identify up to three roles per person to describe their functions.

Role	Count	Percentage
Teacher in Primary, Secondary or Vocational Education and Training	2	5.7%
Trainer in companies, training centres, or private academies	2	5.7%
Teacher-researcher in Universities and Higher Education	23	65.7%
Instructional designer that creates educational content using innovative educational methods	4	11.4%
Professional coach, corporate training facilitator	1	2.8%
Teacher working with students with special educational needs	1	2.8%
Digital learning professional (educational engineer, project manager, etc.)	4	8.5%
Digital learning technical professional (graphic designer, developer, tutor in e-learning, etc.)	5	14.2%

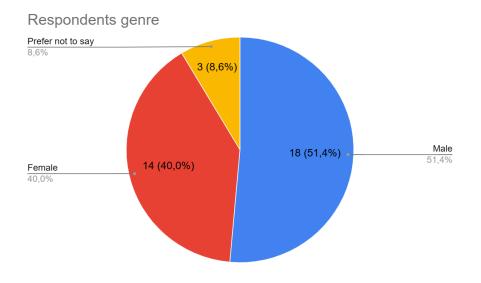
QUESTION 2 -6 items- Age. **Average** age in this group is **47.1 years old** (for the 60+ years range, we estimate 65 as a reasonable midpoint). The near absence of educational professionals under 30 pushes the average upwards, and suggests that

fewer young people are entering the profession, potentially due to unattractive working conditions, salaries or training hurdles. Aging staff can lead to a reduced adaptability to changing educational methods, like the introduction of digital tools. (https://www.researchgate.net/publication/359316504_AGE_STRUCTURE_OF_TEACHERS_IN_SELECTED_EU_COUNTRIES)

However, in Section 3 -NEEDS-, question 14, we see that a strong commitment to learning about AI usage prevailed on the part of the respondents, even if they had to learn on their own. If we accept the general wisdom that teachers in their 20s are considered young staff, those in their 30s and 40s, medium aged staff and those in their 50s and 60s, normally with over 20 years' experience, would be mature staff, then we can say that **French group correspondents are equally divided between medium aged and mature staff categories, with a very low percentage of young staff in our sample.**



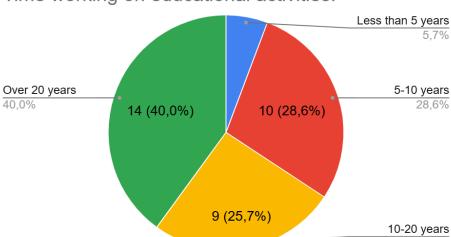
QUESTION 3 -3 items- Gender.





A bit surprisingly, compared to the feminization of the educational profession in Spain for instance, France presents an 11.4 percentage points higher presence of males than females among the French survey respondents, but this is consistent with data available here: "The share of women among teaching staff in post-secondary non-tertiary education is one of the smallest among OECD and partner countries with available data. (42 %, rank 18/22, 2022) Download Indicator"

QUESTION 4 -4 items- *Time in teaching, training, management.* The graph shows an experienced group of educational professionals with and average of **16.4 years at work** (we assume midpoints for calculation since the range is open-ended).



Time working on educational activities.

QUESTION 5 and QUESTION 6 -2 items- Average number of learners per session and per year. Those respondents that mostly fall into the role of teacher/researcher in Universities and Higher Education, had an average of 47 students/trainees per session and an average of 260 per year. The respondents that belong in their majority to the role of digital learning professionals and instructional designers reported around 25 students/trainees per session and 140 per year. The data on the 2022 Eurostat report referring to the ratio learner-teacher (link above) would not necessarily apply to the French groups because it refers to Upper Secondary whereas here we are mostly dealing with college level students since the respondents mostly chose the roles of Teacher-researcher in Universities and Higher Education and Digital learning technical professional (graphic designer, developer, tutor in e-learning, etc.). In any case, the ratio for France is 11.5, slightly higher than the EU average of 11.2

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Secondary_education_statistics



• SECTION 2 **Perceptions of AI** Questions 7-13

QUESTION 7 -5 items- Frequency of AI usage. When asked how often respondents used AI, we obtained the following:

Daily	Weekly	Monthly	Rarely	Never
11.4%	42.85%	11.42%	31.4%	2.85%

The third plus of respondents that use AI rarely or never may seem too high, but on the contrary, it marks a positive trend when compared to a national report from 2023 that said 45% of Secondary Education teachers had not used educational AI tools since the beginning of the school year, while 15% used them weekly: (https://www.academia.edu/122867375/National_Evaluation_Report_France?utm_source=chatgpt.com).

Extrapolating, there has been a decrease in teachers who rarely or never use AI tools and an increase in those who use it weekly, which is consistent with question 8 below, where over 65% was sure to use AI in the future.

QUESTION 8 -3 items- *Plans to use AI in future.* Respondents' intentions:

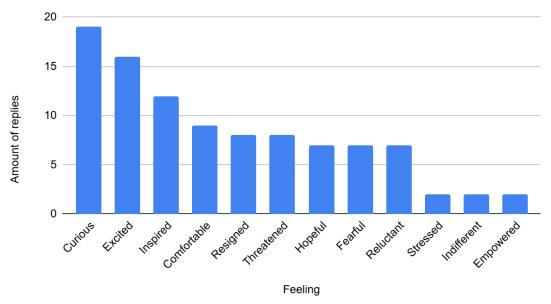
No	Maybe	Definitely
5.7%	28.57%	65.71%

QUESTION 9 -5 items- Degree of interest in AI usage. 90% of respondents share a positive degree of interest in AI usage ranging from interested (32.5%) to interested and happy to use it (17.5%) and to interested and willing to train to take advantage of its full potential (40%). However, there is still a 7.5% who expresses no interest in AI and 2.5 % who is not interested but resigned to using it.

QUESTION 10 -13 items- *General feeling about AI.* Respondents could choose as many options as desired among a range of feelings towards AI usage, 5 of which offered positive connotations feelings and 5 negative ones, and the participants could add feelings of their own to better describe their moods. This is why the total number or replies is bigger than that of respondents. Only 3 of them added feelings to the list and these had negative connotations: **disgusted, forced to do something,** and **scared**. Overall, <u>positive feelings</u> came up in 65 replies: **curiosity** was the prevalent feeling followed by **excitement,** and by feeling **inspired** and

comfortable while using AI. <u>Negative feelings</u> added up 17 replies with a tie between feeling **fearful** and **threatened**. <u>Mildly negative feelings</u> like **resigned and reluctant** accounted for 15 answers and only 2 respondents were **indifferent** towards AI, as we can see below:





QUESTION 11 -5 items- Kind of data willing to share. There is a clear majority who would be willing to share their own teaching /training /management content (71.4%) followed by those willing to share the tracking of learners' activity (37%). At a distance, 8.5% would not object to sharing their personal data or that of students and 17%, on the contrary, would rather not share any type of information or do so only in its smallest possible amount.

QUESTION 12 -10 items- Awareness of AI terms. The 35 participants assessed their level of awareness regarding ten key terms associated with artificial intelligence using a five-point scale: 1 Fully Aware, 2 Heard of it and partial understanding (somewhat aware), 3 Heard of it but limited understanding (little awareness), 4 Not sure have heard of it (barely aware), and 5 Not Aware at All. The findings reveal notable variation in familiarity depending on the topic.

High Awareness Terms

Several concepts showed overwhelmingly **high levels of awareness** among respondents:

- **Privacy and Security Concerns** and **Ethical Concerns** had the highest recognition, with 28 and 27 participants respectively identifying themselves as Fully Aware, and **no respondents indicating low or no awareness.**
- **Misinformation and Manipulation:** with 27 Fully Aware, 7 Partially Aware and **Biases**, 27 Fully Aware, also exhibited strong awareness levels, though Biases had a minority of 8 respondents unfamiliar or unaware (4 Hadn't Heard of It, 4 Not Aware).

Moderate Awareness Terms

Topics such as **Machine Learning**, **Environmental Impact**, and **Overreliance on AI** reflected **moderate to high levels of awareness:**

- **Machine Learning** was Fully Understood by 20 respondents, with 8 Partially Aware and 5 indicating only a Limited Understanding. Two participants reported being Not Aware at All.
- **Environmental Impact** saw 24 participants as Fully Aware and 8 as Partially Aware, though 3 reported only a Limited Understanding.
- Overreliance on AI had 16 respondents Fully Aware and 16 Partially Aware, with only 2 indicating they Hadn't Heard of It.

Low Awareness Terms

Some concepts displayed a more even distribution across the awareness scale and tended to have fewer Fully Aware answers:

- **Hallucinations** (AI generating false or misleading content) was Fully Understood by less than half (16 respondents), while 15 indicated varying degrees of limited or no awareness.
- **Legal and Regulatory Conditions**, with only 15 participants as Fully Aware and one participant who had never heard of the term. However, combined with 15 Partially Aware responses, general familiarity remains relatively high.
- Lack of Explainability (related to understanding AI decision-making) had only 10 respondents who were Fully Aware, and a spread across all levels of awareness.

Overall, the results suggest that participants **are mostly aware with ethical**, **social**, **and practical risks of AI** (e.g., privacy, ethics, and misinformation), as well

as core concepts like Machine Learning. In contrast, more technical or specialized terms such as hallucinations, explainability, and legal frameworks are less well-understood.

These are the terms that had **the most Fully Aware** recognition in decreasing order and with the number of respondents and corresponding percentage for the French group:

- Privacy and security concerns: 28 - 80%

- Biases: 27 - 77%

- Ethical concerns: 27 - 77%

- Environmental impact: 24 - 68%

- Machine Learning: 20 - 57%

And these are the terms that had **the lowest level of Awareness, marked as Not Aware at All**:

- Hallucinations: 7 - 20%

- Lack of explainability: 5 - 14%

- Biases: 4- 11%

- Machine Learning: 2 - 5.7%

QUESTION 13 -free writing contribution- *Ethical issues.* Out of 35 French respondents, 21 contributed their thoughts on whether there could be ethical issues when it comes to the use of AI for educational or managerial activities. Their concerns appear below grouped by categories 1-5:

1. Privacy and Data Protection	 Intrusion into personal lives through misuse of personal data. Risks of commercial exploitation. Need for strong data protection. 	
2. Bias and Misinformation concerns	 - Al may be biased or manipulated depending on how it is trained. - Can become a tool for misinformation, even political propaganda (e.g., Chinese state Al). 	
3. Intellectual Property	 Al may use or "steal" content without permission. Raises issues of content ownership and creator consent. Al will 'steal' and aggregate content for which we may not have the rights. 	

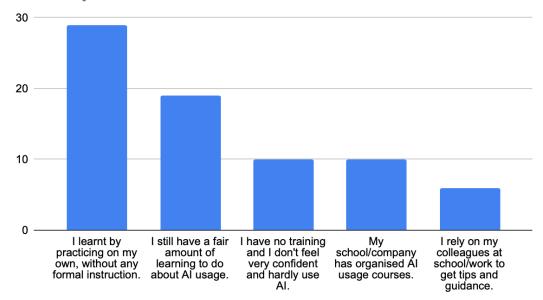
4. Source Reliability - No guarantee of accuracy or source credibility in Al-generated content. - Concerns about educators generating entire courses without verifying the content. - Plagiarism, false information. 5. Loss of Control Risk of relinguishing control over what is taught. - AI service providers could influence or determine educational content. - People believe in AI without understanding it, without understanding its limitations. It can cause catastrophic decisions if we trust the machine absolutely. - There's a risk of ready-made thinking, and I think it's dangerous to delegate an intellectual task to a machine. - The replacement of individual reflection in favour of solutions provided by Al.

Only one comment said there was no concern. There is an overwhelming bigger amount of shared and prevalent worries expressed in the different categories compared to the sole carefree comment.

• SECTION 3 **Needs** Questions 14-16

QUESTION 14 -5 items- How was AI usage learning. A clear majority of 68.5% has learnt AI tools usage for educational or managerial purposes on their own, compared to only 11.4% who had some sort of formal training courses offered by their institutions. 43.8% is open to keep on learning further AI uses and 14% rely on colleagues.





This shows a high degree of initiative and commitment on the part of teachers/trainers and also a certain lack of institutional support for the transition from traditional methods to the introduction of nearly unavoidable digital tools of all sorts in today's teaching practices. However, there are national initiatives that aim to fill this formation gap for educational professionals: in the case of France, among other programmes, there is a nation-wide Erasmus+ KA3 project called AI4T (AI forTeachers), which gathered 256 volunteer teachers across 120 schools with the aim "To give teachers the ability to analyse, in their professional practice, educational resources that include elements of AI — of which they are not always aware — and to address with confidence the major challenges of AI in education, in particular the ability to explain to students the data and natures of AI used and their purpose." https://www.ai4t.eu/

QUESTION 15 -14 items- Frequency of AI tools usage. The data reveals how frequently **35 respondents** use AI tools across **14** different educational or professional tasks graded on 5 usage frequency levels: **always**, **often**, **sometimes**, **rarely**, **never**.

The tasks that reveal the **most frequent use (always and often)** are these, followed by the number of respondents that have chosen them and the percentage their represent:

- Create evaluation materials: 19 54%
- Create extra materials for learners that need further practice:18 -51%
- Simulate labs and hands-on exercises: 17 48%

- Grade exams in different formats (multiple choice, short or even long answers): 14 40%
- Search/provide feedback on new tools, resources, methodologies and so on:14 40%
- Adapt materials to learners with special learning needs: 13 37%

The results suggest that **the automation function** that AI can provide is **highly valued** and that **AI is being used to support differentiated learning.** Also, that AI is becoming important in learning simulations and that it is having a growing role in professional development. It also hints at a usage of AI to help personalize materials for special learning needs, but not overwhelmingly.

The tasks that reveal a moderately frequent use (sometimes) are these:

- Generate lessons plans: 13 37%
- Create innovative learning materials: 11 (10 often) 31%

A bit surprisingly, it seems that the ability of AI for creating new learning materials has not fully caught up yet with French educational professionals, as if the innovative side of AI somehow needed to be further trusted. There is some adoption but it is not dominant yet.

The tasks that reveal a less frequent use (rarely or never) are these:

- Write reports for parents: 16 45%
- Track learners performance: 14 40%
- Use tracking to give students feedback on their performance: 13 37%
- Write administrative reports: 12 34%
- Managerial tasks: 12 -34%

The results in the less frequent usage may be explained by a lack of tools or by privacy or ethical concerns (which emerged in Section 2 question 12 as regards data privacy in the task "write reports for parents" specially). In the task category of writing reports (both for administration purposes or for parents) there is a polarized response, with "often" and "never" almost evenly distributed among participants' choices. This duality might just be accounted for by a managerial and administration system at schools and companies in France that is known for its famously heavy bureaucracy and report-oriented procedures. Perhaps this fact instils some slight fear in professionals who are reluctant to use AI tools to facilitate report writing and a rather rebellious attitude in others as a form of mild protest. Again, just speculating.

Section 2 question 11, showed that **37% was willing to share the tracking of learners' activity with an AI**, so it must be a matter of lack of tools or lack of usage skills on the part of the teacher/trainer/manager that makes its actual use of these tracking tools to fall into the "rarely" or "never" frequency range rather than in the "sometimes". Or simply, as with the rest of the tasks in this low usage frequency, it might be the case of an adoption pattern that is still emerging.

QUESTION 16 - free writing contribution- Other tasks you would like an AI to do for you. Most respondents did not elaborate further on this question. There are but a few contributions that say:

- Follow up of "my" daily tasks.
- Assist trainees during digital training courses in a suitable setting.
- Data processing and visualization.
- Any task with no real value that can be automated.
- Proofreading.

One respondent wrote that the question was not appropriate arguing that "the AI is a tool and it will not be made at the user's mercy, it will be used by the user". And that was precisely what the survey wanted to ask: if the user would like other tasks performed by the AI that did not appear on the question's list because this data could complete further necessary information to complement current AI needs in the educational field.

• SECTION 4 Expectations

Questions 17-18

QUESTION 17 -8 items- *Support needed to learn AI usage.* Since respondents could choose **multiple options**, percentages shown below exceed 100%.

- The **top 3 preferences** reflect a desire for direct, interpersonal, hands-on learning and practical resources, which are closely followed by the distance-learning option too:
 - Face-to-face training: 60%
 - Access to specific tools: 51%
 - Interactive online course: 51%
- Then there comes a **mid-range preference** for autonomous learning:
 - General guidelines/manuals: 40%

- And finally, **lower preference** options such as:
 - Expert consultation: 20%
 - General support (extra planning time) and infrastructure, both at 11%

QUESTION 18 -7 items- *Perceived AI influence on different activities.*Respondents have graded their perception of the influence that AI usage could have on different educational activities and here is a summary of the data:

High influence	Intermediate influence	Low influence
- Make learning more interactive. 20 - 57%	- Analyse training methodology. 16 - 45%	- Comply with data/security laws. 16 - 45%
- Perform repetitive managerial tasks.20 - 57%	- Adapt content to diverse learning capacities. 12 - 34%	- Personalise learning paths. 6 - 17%
- Perform repetitive teacher/trainer tasks. 20 - 57%		- Perform repetitive managerial tasks. 5 - 14%

Efficiency tasks (automation, interactivity) are seen as AI's strongest suit along with introducing more interactive learning. Pedagogical support tasks (personalisation, analysis) are promising but less certain in respondents' eyes and it seems that they assign a low influence to compliance and legal aspects as well as personalization of learning paths, which may be viewed as possibly requiring human oversight or more robust systems.

4. Survey results and analysis -IRELAND-

• SECTION 1 You and your role Questions 1-6

QUESTION 1 -9 items- *Roles within the educational profession.* As shown below, the majority of teachers come from Primary, Secondary or VET (87.2%) followed by the role of teachers working with special needs (28.2%), which is relevant for the project since the promotion of equity and inclusion in educational contexts is a valued objective of the AIRED project. There is a small percentage of teacher-researcher and professional coach (2.6%). In Ireland's case, respondents added two more roles to the survey's list: School Principal coordinating a whole school approach to digital learning

and Primary School Principal Administrator. Each role added 1 count and a 2.6% representation of teachers involved. The count exceeds the number of **39 respondents** because it was possible to identify up to three roles per person to describe their functions.

Role	Count	Percentage
Teacher in Primary, Secondary or Vocational Education and Training	34	87.2%
Trainer in companies, training centres, or private academies	0	0.00%
Teacher-researcher in Universities and Higher Education	1	2.6%
Instructional designer that creates educational content using innovative educational methods	0	0.00%
Professional coach, corporate training facilitator	1	2.6%
Teacher working with students with special educational needs	11	28.2%
Digital learning professional (educational engineer, project manager, etc.)	0	0.00%
Digital learning technical professional (graphic designer, developer, tutor in e-learning, etc.)	0	0.00%

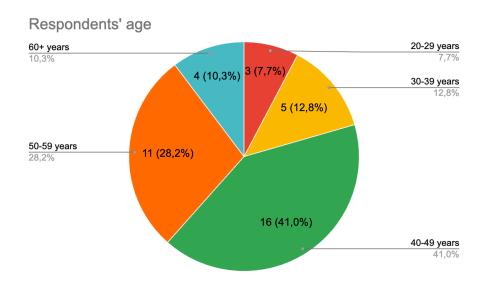
QUESTION 2 -6 items- *Age.* Most respondents (41%) are between **40-49 years of age,** which is lower than the average age mentioned in this information: The percentage of primary to upper secondary teachers aged between 30 and 49 is especially high. (65.6 %, rank 3/40, 2022) <u>Download Indicator</u>. The **average age** of **our respondents is 46.6.** And the second highest figure (28.2%) corresponds to those between 50-59. It seems a sort of recruiting educational profiles crisis emerged on the island in 2011 after discriminatory pay scales were introduced and was exacerbated further by other career design factors, which diminished recent entrants to the profession and stimulated early retirements (80% of teachers leave before retirement age -data from 2016-

https://www.irishexaminer.com/news/arid-20415835.html?utm_source)

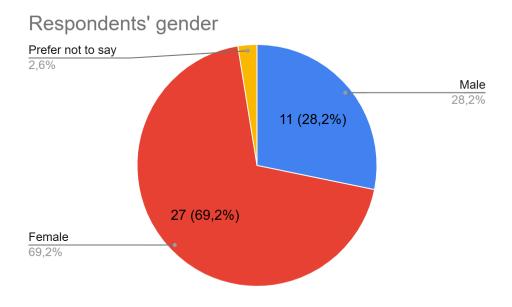
In our survey, **only 7.7% are under the age of 25**, which aligns this group almost exactly with the country's general data: according to The Teachers Union of Ireland, only 7% of Irish teachers are under the age of 25. This is part of a

concerning trend where the average age of post-primary teachers is 41.1, and over 15% are over 55 (TUI oral submission on Teacher Shortages to Oireachtas Committee, 18th April 2018)

https://www.tui.ie/_fileupload/daveduffSubmission%20To%20Joint%20Committee%20on%20Education%20and%20Skills%20on%20Recruitment%20and%20Retention%20issues%20in%20Teaching.pdf

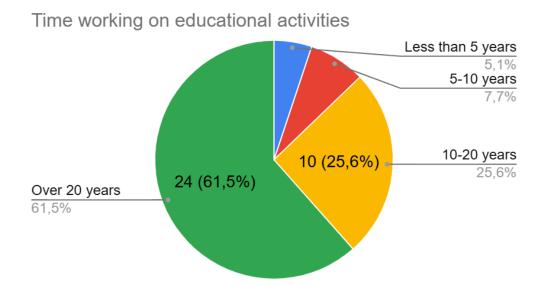


QUESTION 3 -3 items- *Gender.* **Female** respondents account for almost **70%**, yet another example of educational professions feminization, as is the case in Spain. One respondent chose not to reveal their gender.





QUESTION 4 -4 items- *Time in teaching, training, management.*



QUESTION 5 and -QUESTION 6 -2 items- Average number of learners per session and per year. The average is 24 learners per session but there are big fluctuations among respondents with from as little as 4 or 6 learners per session to 30 or more. The average per year is 155. The learner-teacher ratio for Upper Secondary education in Ireland in 2022 was 12.3, which is above the 11.2 EU average.

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Secondary_education_statistics. It seems this ratio has been consistently above the EU average.

• SECTION 2 **Perceptions of AI** Questions 7-13

QUESTION 7 -5 items- Frequency of AI usage. When asked how often respondents used AI, we obtained the following:

Daily	Weekly	Monthly	Rarely	Never
23.1%	30.8%	12.8%	7.7%	25.6%

As with the French respondents, weekly AI usage scores the highest percentage. However, it is rather striking the high percentages on the extreme of the spectrum between daily usage and never: practically a quarter for each, in stark contrast to French figures, the Irish respondents more than double the daily AI usage and

never use it eight times over! This might be explained by the fact that the majority of Irish respondents work with learners with special needs, where perhaps AI tools usage in educational practice has not yet permeated the methodology. This might respond to different reasons, like gaps in teachers' training in the tools or lack of AI tools tailored to their teaching needs, or equipment shortages, among other possibles causes.

QUESTION 8 -3 items- *Plans to use AI in future.* Respondents' intentions:

No	Maybe	Definitely
12.8%	48.7%	38.5%

The resolve to integrate AI tools in educational activities in the future remains open for a majority of respondents. The ones who have no doubts about it are 27 percentage points lower than their French counterparts.

QUESTION 9 -5 items- Degree of interest in AI usage. Close to French estimates, 88% of Irish respondents share a positive interest in AI usage, with a majority of 46.2% expressing the highest interest. But 12% are not interested, 3 points above French scores.

QUESTION 10 -13 items- *General feeling about AI.* Respondents could choose as many options as desired among a range of feelings towards AI usage, 5 of which offered positive connotations feelings and 5 negative ones, and the participants could add feelings of their own to better describe their moods. 5 respondents added feelings to the list and these had negative connotations:

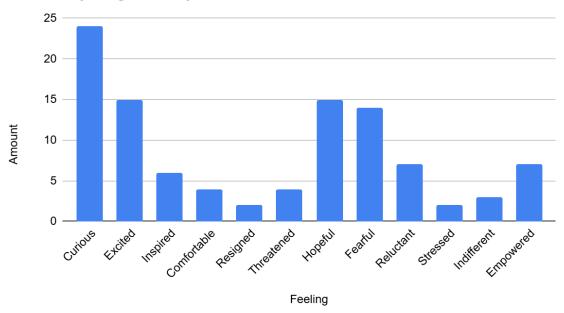
- Worried about students cheating with it.
- Very concerned that the use of AI is not as controlled as it should be.
- Nervous.
- Resentful of the imminent death of creativity and independent achievement.
- Until AI is reliably accurate I will not be using it.

In contrast, <u>positive feelings</u> appeared in 71 replies, with **curiosity** as the prevalent one followed with a tie between **excitement and hopefulness.**

<u>Negative feelings</u> added up 18 replies with a tie between feeling **fearful** and **threatened**. <u>Mildly negative feelings</u> like **resigned and reluctant** accounted for 9 answers and only 3 respondents were **indifferent** towards AI, as we can see below:







QUESTION 11 -5 items- Kind of data willing to share. Very similarly to the French group, there is a clear majority who would be willing to share their own teaching /training /management content (79.5%) also similarly followed by those willing to share the tracking of learners' activity (33%). At a distance, only 2.6% would not object to sharing their personal data and 10.3% that of students. Finally, 13% are against any form of data sharing.

QUESTION 12 -10 items- Awareness of AI terms. The 39 participants assessed their level of awareness regarding ten key concepts associated with artificial intelligence (AI). Respondents were asked to rate their familiarity with each term using a five-point scale: 1 Fully Aware, 2 Heard of it and partial understanding (somewhat aware), 3 Heard of it but limited understanding (little awareness), 4 Not sure have heard of it (barely aware), and 5 Not Aware at All. The findings reveal notable variation in familiarity depending on the topic and could be summarized as follows:

High Awareness Terms

 Ethical Concerns and Privacy and Security Concerns had the highest recognition, with 22 and 21 participants identifying themselves as Fully Aware, showing a strong recognition of AI-related social issues, in the line as French group replies. However, there were 7 respondents in the Irish group that manifested not being aware, whereas there was no one in the French

group with this level of unawareness.

• **Biases** and **Misinformation and Manipulation** also scored highly, with 21 and 20 respondents respectively indicating full awareness. This is very much in line with French replies too.

Moderate Awareness Terms

- Machine Learning showed a broad distribution: 10 fully aware, 10 partially aware, and 9 with limited understanding, as well as 7 with no awareness at all, suggesting general familiarity but room for deeper understanding.
 Overall, the moderate awareness of this term is lower than that of the French group.
- Over-Reliance on AI was recognized by many (18 fully aware), indicating concern about AI's role in decision-making.

Lower Awareness Terms

- Hallucinations (only 8 fully aware, 13 not aware at all) and Lack of
 Explainability (8 fully aware, 10 not aware at all) revealed the lowest
 awareness levels. These terms may require more outreach or education as
 they relate to complex AI behaviors and system transparency and are similar
 to previous findings in the French group as it seems that more technically
 challenging or specialized terminology are more difficult to understand.
- Environmental Impact and Legal and Regulatory Conditions had mixed levels of understanding, with a relatively even distribution across all categories, indicating varied levels of exposure and concern.

These are the items that had **the most Fully Aware** recognition with the number of respondents and the percentage within the Irish group:

- Ethical concerns: 22 - 56.4%

- Privacy and security concerns: 21-53.8%

- Biases: 21- 53.8%

- Misinformation and manipulation: 20 - 51%

- Over reliance on AI: 18 - 46%

And these are the terms that had **the lowest level of Awareness, marked as Not Aware at All**:

- Hallucinations: 13 - 33%

- Lack of explainability: 10 - 25%

- Environmental impact: 8 20%
- Biases: 7 18 %
- Machine Learning: 7- 18%

QUESTION 13 -free writing contribution- *Ethical issues.* Out of 39 Irish respondents, 33 contributed their thoughts on whether there could be ethical issues when it comes to the use of AI for educational or managerial activities. Their concerns appear below grouped by categories 1-5:

1. Privacy and Data Protection	 Inputting of personal data, particularly when it relates to children. Teachers should avoid sharing school attainment data or student information. Access to student data linked with names and personal details.
2. Bias and	- Al can be used to manipulate information to suit biases.
Misinformation	Biases inputted by humans.Reduction of independent thought.
concerns	- Oversight needed to reduce misinformation.
3. Intellectual Property	- Teacher-created material and copyright.
	- Sharing information without copyright.
	- Al uses content created by others.
	- Raises issues of content ownership and creator consent.
4. Source Reliability	- Reliability of the material. Some Al output can be inaccurate.
,	 Al provides factoids, not critical analysis. Oversight to reduce misinformation. Hallucinations (Al-generated inaccuracies).

6.Cognitive impacts.

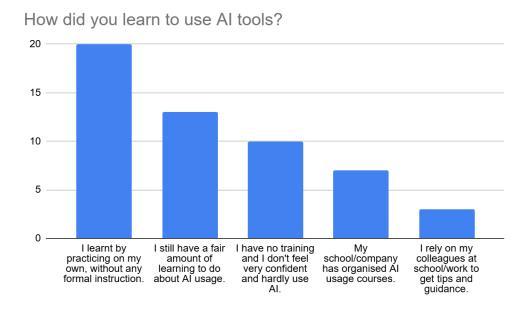
- Students who used AI for projects and pretended they wrote the information all by themselves.
- Humans should be able to make decisions, not rely on the AI to make the decision for them.

Most of group's comments fell into the same categories as the previous French group but with one interesting addition, that of the impact AI is having on students knowledge acquisition and how they are using it to do their work for them without using their previous knowledge or critical thinking of their search results. Also, the Loss of Control category was greatly enriched.

SECTION 3 Needs

Questions 14-16

QUESTION 14 -5 items- How was AI usage learning. Again, as with the French group, most respondents (51.3%) have learnt on their own, no formal course attendance involved. A third recognises that they still have a fair amount of learning to do on AI usage and a full quarter have had no training at all and don't feel confident in AI usage. 18% have learnt through school or company organized courses, almost 5 percentage points more than their French counterparts. Only 7.7% rely on colleagues for tips and guidance, again the lowest score. Speculating, there might not be colleagues around savvy enough to resort to, or those in need of guidance are too shy to ask for it.



QUESTION 15 -14 items- Frequency of AI tools usage. The data reveals how frequently **39 respondents** use AI tools across **14 different educational** or

professional tasks, and graded on 5 usage frequency levels: **always**, **often**, **sometimes**, **rarely**, **never**.

The tasks that reveal the **most frequent use (always and often)** are these, followed by the number of respondents that have chosen them and the percentage their represent:

- Create extra materials for learners that need further practice: 20 51%
- Create innovative learning/training materials: 19 48%
- Search and provide feedback on new tools/resources: 18 46%
- Adapt materials to learners with special needs: 17 -43%
- Help in a variety of managerial tasks: 17 43%
- Generate lesson plans: 14 35%
- Create evaluation materials: 11 28%

That creating extra materials for further practice comes first in AI tools usage frequency is only logical for the Irish group, where the majority of roles of the respondents were "work with learners with special need". In this case, we see a clear use of AI tools to support differentiated learning. The same goes for the second and third choices; professionals need innovative materials and information on the state of new resources and tools because there is probably a stronger need and difficulty in reaching diverse learners and offering them the best possible options for fulfillment and success. It may be a bit surprising that "adapt materials ..." does not rank a bit higher in the high frequency use, being this the group with more respondents working with special needs learners (28.2%).

The tasks that reveal a moderately frequent use (sometimes) are these:

- Generate lesson plans: 15 38%
- Create evaluation materials: 15 sometimes -38%
- Write up reports (admin/parents): both types show 13–15 "Sometimes" responses: 35% approximately.

The two first categories are almost evenly distributed between higher and moderate frequency as we can see above. They just fall a tad short of high frequency.

The tasks that reveal a **less frequent use (rarely or never)** are these:

- Use AI to give students feedback from tracking: 27 69%
- Track learners' performance: 26 66%
- Grade exams in different formats: 24 61%
- Simulate labs/hands-on: 22 56%

The low frequency of the first 3 categories in the less frequent range usage may be explained by the concerns on data privacy and security, as stated in Section 2 question 12.

QUESTION 16 - free writing contribution- Other tasks you would like an AI to do for you. 19 out of 39 respondents contributed to this optional question and 5 of them answered that either they did not want the AI to perform any education-related task for them or that they could not think of any at that time. Some sounded a bit offended with a rotund "Absolutely not. I am perfectly capable of completing my own work." or this other one: "No, I would rather use my own brain power".

Among those willing to exploit AI tools further, these are some of their contributions:

- Management of time within allocated work hours.
- Generate subject specific animations.
- Mark photographs of students' work.

And several others mentioned tasks for which there already are AI tools and/or already appear on the given list, such as tracking activities, differentiated materials creation, chatbots for foreign language acquisition practice, and repetitive tasks.

• SECTION 4 Expectations

Questions 17-18

QUESTION 17 -8 items- Support needed to learn AI usage.

- The clear top 2 preferences reflect an almost evenly divided sample as regards mode of acquiring further knowledge about AI usage, online or in person learning. There is a tie in access to specific tools and extra planning time, which is slightly preferred over the support directly provided by an AI or IT expert.
 - Interactive online course: 74.4%
 - Face-to-face training: 69.2%
 - Access to specific tools: 48.7%
 - General support (extra planning time): 48.7%
 - General support (AI or IT expert available for consultation: 46.2%
- Then there comes a mid-range preference for autonomous learning:

- General guidelines/manuals: 30.8%
- And finally, **lower preference** mentions at a distance are these:
 - Infrastructure: 23.1%
 - One respondent contributed with an additional preference about preferred support for learning more about AI: "More information and assurances about the security implications and also theft of others work over the year": 2.5%

QUESTION 18 -7 items- *Perceived AI influence on different activities.*Respondents have graded their perception of the influence that AI usage could have on different educational activities and here is a summary of the activities followed by the number of respondents who have chose that level of influence and the percentage:

High influence	Intermediate influence	Low influence
- Help with adapting content to diverse learning capacities: 25-64%	- Analysis of teacher/trainer methodology to optimise instruction strategies:	- Comply with data/security laws: 14-35%
- Automating repetitive (managerial and teaching) tasks: 24-61%	- Personalize learning experiences by customizing learning paths: 19-48%	- Make learning more interactive with virtual assistants, chatbots or gamified learning: 11-28%

5. Survey results and analysis -SPAIN-

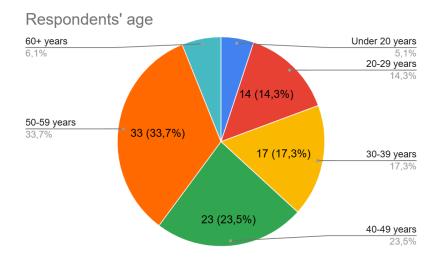
• SECTION 1 You and your role Questions 1-6

QUESTION 1 -9 items- Roles within the educational profession. A considerable majority of the 98 respondents in Spain identify themselves as Primary, Secondary or VET teachers (74.48%). Followed at a distance, but for the first time so far in this role, by professionals that create educational content using innovative educational methods -instructional designers- (10.2%). Besides the clear majority of teachers in Primary, Secondary and VET, and the presence of the said instructional designers, Spanish respondents added several more roles to those original present in the survey's

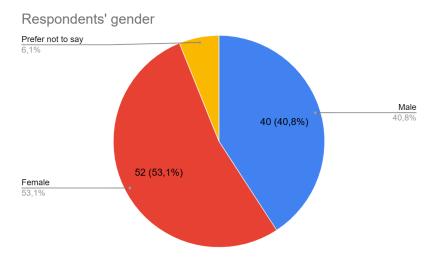
list. They mentioned 6 more: VET school Director, School Secretary, Lawyer, Official School of Languages, IT specialist, Head Master. All the added roles represented 1 respondent each (or 1%). The count exceeds the number of 98 respondents because it was possible to identify up to three roles per person to describe their functions.

Role	Count	Percentage
Teacher in Primary, Secondary or Vocational Education and Training	73	74.48%
Trainer in companies, training centres, or private academies	8	8.2%
Teacher-researcher in Universities and Higher Education	7	7.1%
Instructional designer that creates educational content using innovative educational methods	10	10.2%
Professional coach, corporate training facilitator	4	3.36%
Teacher working with students with special educational needs	1	1%
Digital learning professional (educational engineer, project manager, etc.)	2	2%
Digital learning technical professional (graphic designer, developer, tutor in e-learning, etc.)	3	3%

QUESTION 2 -6 items- *Age.* This is the only group where there are 5 respondents **under 20, accounting for 5.1%** of the 98 educational professionals that filled in the survey. However, **the majority is in their fifties**, almost matching the average for Spanish teachers nationwide: 49.6 years of age. **The average** for educational professionals in this group of 98 respondents **is 42.7 years,** lower than that of France and Ireland due to the above mentioned inclusion of the five under twenties.



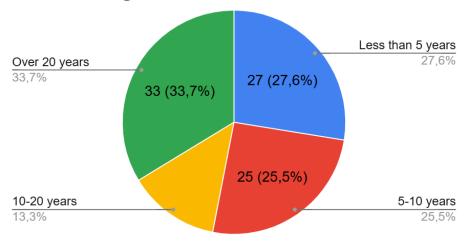
QUESTION 3 -3 items- *Gender.* Male/female ratio seems to be more balanced in the case of Spanish respondents but still there is a 12 percentage point difference for females presence. Considering that this is the group that has the highest percentage (74.8%) of people working in Primary, Secondary or VET roles we clearly see that the presence of females in education is clearly higher compared to that of male professionals.



QUESTION 4 -4 items- *Time in teaching, training, management.* **13 years** is the average time working in the educational domain for this group of respondents.



Time working on educational activities.



QUESTION 5 and -QUESTION 6 -2 items- Average number of learners per session and per year. 18.6 is the average number of learners per session, the lowest so far and consistent with this the number of learners per year is also the lowest at 63. Also, in accordance with this data, Spain's learner-teacher ratio for Upper Secondary education was 10.1 in 2022, lower than the EU average of 11.2 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Secondary_education_statistics

• SECTION 2 **Perceptions of AI** Questions 7-13

QUESTION 7 -5 items- Frequency of AI usage. When asked how often respondents used AI, we obtained the following:

Daily	Weekly	Monthly	Rarely	Never
25.5%	37.7%	15.3%	18.4%	3.1%

In line with French and Irish respondents, Spanish ones use AI tools in their majority on a weekly basis (but 5 points lower than French and 7 points higher than Irish).

QUESTION 8 -3 items- *Plans to use AI in future.* Respondents' intentions:

No	Maybe	Definitely
3.8%	30.6%	65.3%

The percentage **planning to use AI in the future is in the majority**, almost the same as with the French results and nearly doubles Irish intentions for future AI usage.

QUESTION 9 -5 items- Degree of interest in AI usage. Matching French positive interest in AI usage comes the Spanish one at 90%. No interest is present in the remaining 10%, which is 2 points lower than Irish results and 1 point above French ones.

QUESTION 10 -13 items- *General feeling about AI.* Respondents could choose as many options as desired among a range of feelings towards AI usage, 5 of which offered positive connotations feelings and 5 negative ones, and the participants could add feelings of their own to better describe their moods. This is the only group where 5 respondents **have added positive feelings** to the list:

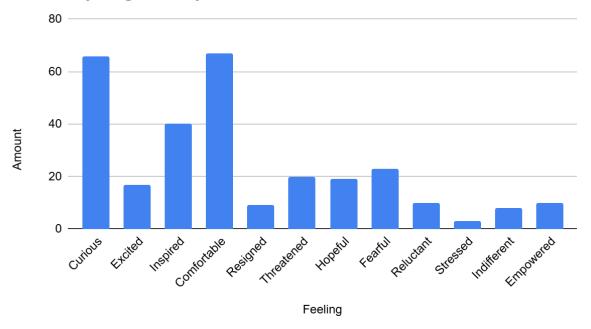
- Secure.
- Helped and supported.
- An extension of intelligence.
- Expanded.
- More agile and sense of opportunity.
- Until AI is reliably accurate I will not be using it.

In contrast, 3 <u>negative feelings</u> were also added: feeling **obliged** and **responsible** for its correct usage in the classroom and feeling **uncertain**, besides feeling **guilty** for the big amount of resources it uses up with every query.

Overall, <u>positive feelings</u> appeared in 219 replies, with **68%** relating **comfortable** as the **prevalent** one **followed almost at a tie by curiosity**, which has been prevalent in the French and Irish surveys.

The most prevalent <u>negative feelings</u> are **fear** and **threat** with **23.5%** and **20.4%** respectively. Fear was also the most prevalent feeling for Irish respondents and for the EU assorted sample too, not so for the French, who feel themselves more threatened than afraid.

How do you generally feel about AI?



QUESTION 11 -5 items- Kind of data willing to share. Spanish respondents are willing to share their own teaching /training /management content (89%) in the highest percentage and moderately willing to share the tracking of learners' activity (23.5%). At a big distance, 6.1% would not object to sharing their personal data but only 2% would share that of students and 7%, on the contrary, would rather not share any type of information or do so only in its smallest possible amount.

QUESTION 12 -10 items- Awareness of AI terms. The 98 participants assessed their level of awareness regarding ten key concepts associated with artificial intelligence (AI). Respondents were asked to rate their familiarity with each term using a five-point scale: 1 Fully Aware, 2 Heard of it and partial understanding (somewhat aware), 3 Heard of it but limited understanding (little awareness), 4 Not sure have heard of it (barely aware), and 5 Not Aware at All.

High Awareness Terms

- **Ethical Concerns** and Misinformation and Manipulation emerged as the best-known terms, with 45 respondents fully aware of each. Both also had relatively low levels of unfamiliarity.
- **Privacy and Security Concerns,** 41 fully aware, and Over reliance on AI, 41 fully aware, also showed high familiarity among respondents.

• **Environmental Impact** followed closely, with 42 fully aware and only 12 not aware at all.

Moderate Awareness Terms

- **Machine Learning** had the highest full awareness overall at 37, with a relatively small number of respondents unfamiliar with the term (only 8 hadn't heard of it, 9 not aware at all).
- Lack of Explainability showed good levels of full, 29, and partial, 25, awareness, though 14 respondents still reported no awareness, indicating it remains a less accessible concept to some.
- **Legal and Regulatory Conditions** had broad mid-level awareness: 27 fully aware, 35 partially aware, and 20 with limited understanding. Only a small minority (7 + 9) were unfamiliar with the term.

Lower Awareness Terms

- Hallucinations had the lowest full awareness with 17, and 55 respondents
 either had not heard of it or were not aware at all. This term, despite its
 increasing relevance in AI discourse, appears less understood, as was the
 case with the previous French and Irish groups.
- **Biases** was relatively well-known (30 fully aware, 19 partially aware), though **21 respondents reported no awareness**, pointing to a significant variation in identifying AI biases with ethical concerns, since the latter appeared in the High Awareness Terms ranking.

These are the terms that had **the most Fully Aware** recognition with the number of respondents and the percentage within the Spanish group:

- Ethical concerns: 45 46%
- Misinformation and manipulation: 45 46%
- Environmental impact: 42 42.8%
- Privacy and security concerns: 41- 41.8%
- Over reliance on AI: 41 41.8%
- Machine Learning: 37 37.7%
- Biases: 30 30.6%

And these are the terms that had **the lowest level of Awareness**, marked as **Not Aware at All**:



- Hallucinations: 31- 31.6%

- Biases: 21- 24.5%

- Lack of explainability: 14 - 14%- Environmental impact: 12 - 12%

QUESTION 13 -free writing contribution- *Ethical issues.* Out of 98 Spanish respondents, 61 contributed their thoughts on whether there could be ethical issues when it comes to the use of AI for educational or managerial activities. Their concerns appear below grouped by categories 1-5:

1. Privacy and Data Protection	 Need to comply with the Spanish and European Laws of Data Protection. Personal data of students if we use AI for exams or work assessment. Making personal data public, images included.
2. Bias and Misinformation concerns	 Ideological bias, manipulation of content, or inaccurate information. Al may provide erroneous data. Material is being generated by Als from private companies with their own interests.
3. Intellectual Property	Misappropriating content.Copyright issues.Use of real photos to make images.
4. Source Reliability	Erroneous content may appear.Trusting the source too much.Failure to check sources.
5. Loss of Control	 Reduction of human interaction. Loss of critical thinking. Overdependence on the tool. If it is not controlled, it can be an enhancer of bias.

6. Cognitive impacts

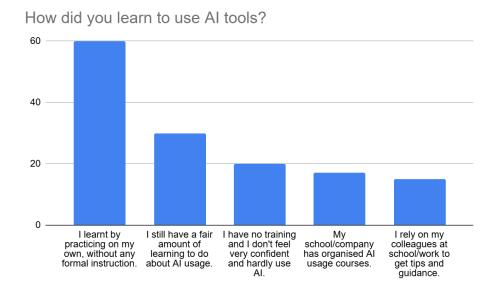
- Students doing everything with AI and not making an effort to acquire knowledge is not a question of ethics, it is a risk for their intellectual development.
- Does not encourage effort, may encourage the search for easy solutions.
- It explains things directly and in the end it prevents you from learning. On the other hand, if you search the internet for information about something you need, you read and acquire more information.
- Using AI as if it were a psychologist to advise them on how to act in X situations).
- There would be a cognitive deterioration as students will not reflect for themselves and will lose the ability to reason on their own.
- Let the AI decide for us.
- Distortion of values and behavioural conditioning.
- An abuse of these systems can make us have less cognitive capacity, think and reason less, become more dependent.

7. Fair Labor and Transparency

- The use of very low-paid labour in annotation tasks to feed AI,
 with exploitative conditions imposed on large numbers of staff
 from poor countries with English as a second language, mostly.
- The opacity of algorithms.

Loss of Control is the category that has scored the highest number of contributions, with 20 comments, followed by Privacy and data protection, with 17. The chart above summarizes the main content of the comments. This group has also included category 6, added by the Irish respondents, and further contributed another category, Fair Labor and Transparency, with a couple of interesting considerations, as shown above.

QUESTION 14 -5 items- How was AI usage learning. Compared to French and Irish groups, Spanish are the ones who have learnt AI usage on their own in a bigger proportion, 61.2% (but lower than the last group of EU countries), probably before their school or organization provided formal courses, which 17.3% mention. It is very likely that in many cases respondents learnt on their own to some extent and then were given the opportunity to enrol in formal courses. 20.4% admit to not having any training in AI usage and those that trust their peers for guidance (30.6%) double the Irish figure. Could be due to the Spanish generally more open character that helps create closer relationships at work and thus asking for guidance becomes easier too, just speculating. Very much in line with French and Irish, over a third of Spaniards also feel they still have way to learn a lot about AI use.



QUESTION 15 -14 items- Frequency of AI tools usage. The data reveals how frequently 98 respondents use AI tools across 14 different educational or professional tasks, and graded on 5 usage frequency levels: **always**, **often**, **sometimes**, **rarely**, **never**.

The tasks that reveal the **most frequent use (always and often)** are these, followed by the number of respondents that have chosen them and the percentage their represent:

- Create innovative learning/training materials: 53 54%
- Search/provide feedback on new tools/resources/methods: 46 46.9%
- Create evaluation materials: 44 44.8%
- Create extra materials for learners needing further practice: 43 43.8%

After the French and the Irish, this is the third group that classifies the creation of materials (for teaching/training, for evaluation, for further practice) in the top frequency use of AI tools.

The tasks that reveal a **moderately frequent use (sometimes)** are these:

- Managerial tasks support: 41 41.8%
- Adapt materials for special learning needs: 40 40.8%
- Develop multimedia content: 39 39.7%
- Simulate labs and hands-on exercises: 36 36.7%
- Generate lesson plans: 35 35.7%

In coherence with the **most frequent use of AI tools for the creation of materials**, there follows in the next range of use the tasks of adapting those materials for special needs and developing multimedia content.

The tasks that reveal a **less frequent use (rarely or never)** are these:

- Reports for parents/departments: 35 35.7%
- Grade exams in different formats: 23 23.4%
- Use tracking to give student feedback: 22 22.4%
- Track learners' performance: 20 20.4%
- Write report for administrative tasks: 8 8.16%

As in other previous groups, **the tracking use for performance and feedback** falls into **the least frequent** range of usage.

QUESTION 16 - free writing contribution- Other tasks you would like an AI to do for you. 34 participants out of 98 volunteered further info for this question, 14 of which did not have any further request for the AI to do other education-related tasks for them. As regards the rest, this is what they added:

- Support with managing difficult classes and how to motivate students with less interest in learning.
- Simulate results of innovative material on different types of learners.
- Better edition.
- Gamified activities.
- Generate rubrics.
- Student's coaching.
- Writing reliable theoretical material.



As with the previous group, there were several additional comments that referred to tasks that already appear in the selection list provided for the survey and 2 respondents were adamant the AI helped them do their ironing!

• SECTION 4 Expectations

Questions 17-18

QUESTION 17 -8 items- Support needed to learn AI usage. Support needed to learn AI usage. Since respondents could choose **multiple options**, percentages may exceed 100%.

- The top 3 preferences selected favour distance learning but in-person training is also present and an IT or AI expert support hand is also valued:
 - Interactive online course: 53%
 - Face-to-face learning: 38.8%
 - Access to specific tools: 37.8%
 - General support (AI or IT expert available for consultation): 32.7%
- In the mid-range preferences we find:
 - General support (extra planning time): 24.5%
- And in the last positions, there appear:
 - General guidelines/manuals: 14.3%
 - Infrastructure: 9%

QUESTION 18 -7 items- *Perceived AI influence on different activities.*Respondents have graded their perception of the influence that AI usage could have on different educational activities and here is a summary of the activities followed by the number of respondents who have chosen that level of influence and its percentage:

High influence	Intermediate influence	Low influence
- Perform repetitive teacher/trainer tasks such as keeping records: 69 -70%	- Analysis of teacher/trainer methodology to optimise instruction strategies: 50- 51%	- Comply with data/security laws: 17 - 17.3%
 Help with adapting content to diverse learning capacities: 58 - 59% Make learning more interactive with virtual assistants, chatbots or gamified learning: 57 - 58% 	- Comply with data/security laws: 47 - 47.9% - Personalize learning experiences by customizing learning paths: 42 - 42.8%	- Analysis of teacher/trainer methodology to optimise instruction strategies: 9 - 9.1%

Spanish respondents coincide with Irish ones in the first two tasks where high and intermedia AI influence is expected, but clearly differ as regards **the activity of making learning more interactive**, where only 3% of this group's respondents assign it a low influence compared to 28% of the Irish group.

6. Survey results and analysis -5 EU COUNTRIES-

• SECTION 1 **You and your role** Questions 1-6

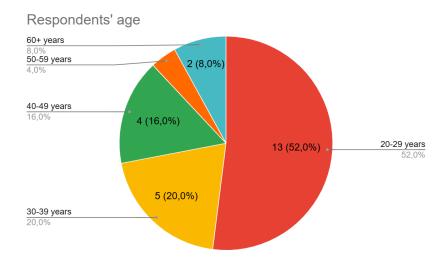
QUESTION 1 -9 items- Roles within the educational profession. The project's partners deemed it appropriate to reach out to other educational professionals outside the boundaries of the respective project partners' countries and thus the Spanish partner sent the survey to contacts in five other EU countries, namely Germany, Greece, Italy, Norway and Portugal, out of which 25 respondents forwarded their surveys. This is the only group of participants where **Digital learning technical professionals (graphic designer, developer, tutor in e-learning, etc.) is the major role at 36%, followed by Primary, Secondary and VET teachers at a tie with Digital learning professional** (educational engineer, project manager, etc.) at 24%.

Role	Count	Percentage
Teacher in Primary, Secondary or Vocational Education and Training	6	24%
Trainer in companies, training centres, or private academies	1	4%
Teacher-researcher in Universities and Higher Education	3	12%
Instructional designer that creates educational content using innovative educational methods	5	20%
Professional coach, corporate training facilitator	0	0%
Teacher working with students with special educational needs	1	4%
Digital learning professional (educational engineer, project manager, etc.)	6	24%
Digital learning technical professional (graphic designer, developer, tutor in e-learning, etc.)	9	36%

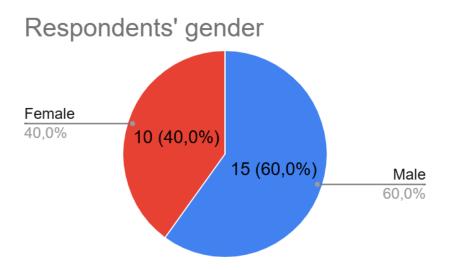
QUESTION 2 -6 items- *Age.* This group presents the youngest average with 52% of respondents in the 20-29 years range, their **average age is 34.1 years**. Since they come from 5 different countries, we will not be contrasting their survey data with that of the average educational staff of their respective origins. Suffice it to say that the problem of aging educational professionals that we mentioned in the analyses of France, Ireland and Spain might be somewhat mitigated in Northern countries, like Norway, where they have seen an increase of 6.6 points in recent years in educational career access of young people, according to an OECD report on education of September 2024.

(https://eldiariodelaeducacion.com/2024/09/24/el-relevo-generacional-del-profesorado-un-problema-a-la-vuelta-de-la-esquina/)

Younger average age may also account for the fact that this group has the highest percentage of respondents (36%) with a digital learning technical profile, as mentioned above in question 1. It is only natural that younger generations present skills and professional features more connected with the current rising technologies and trends.



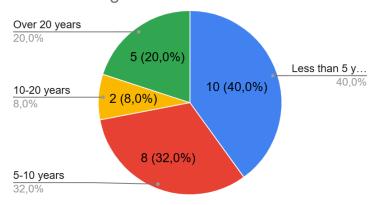
QUESTION 3 -3 items- *Gender.* The data that this group and the previous ones (from France, Ireland and Spain) have provided in the survey proves once again the well-known fact that there is a predominant presence of females in educational roles (as clearly happens in Ireland and Spain and not so much in the French group) and that males tend to opt for more technical studies. This group presented the highest percentage of digital learning technical roles among the respondents, which might be explained by the fact that **it is the only one where males are more present than females in educational activities. We see this phenomenon year after year in our own VET institution in Spain, where whole classes of developers and sys administrators are composed entirely by males.**





QUESTION 4 -4 items- *Time in teaching, training, management.* Coherent with this group having the younger average age, they also have **the lowest count of working years at a 9.6 average.**

Time working on educational activities.



QUESTION 5 and -QUESTION 6 -2 items- Average number of learners per session and per year. The respondents from the 5 different EU countries have an average of **16.5 learners per session** and **95 average per year.**

• SECTION 2 **Perceptions of AI** Questions 7-13

QUESTION 7 -5 items- Frequency of AI usage. When asked how often respondents used AI, we obtained the following:

Daily	Weekly	Monthly	Rarely	Never
48%	36%	4%	12%	0%

This is the only group whose respondents use AI tools daily at 48%. And also the only ones with no one in the "never" frequency category.

QUESTION 8 -3 items- *Plans to use AI in future.* Respondents' intentions:

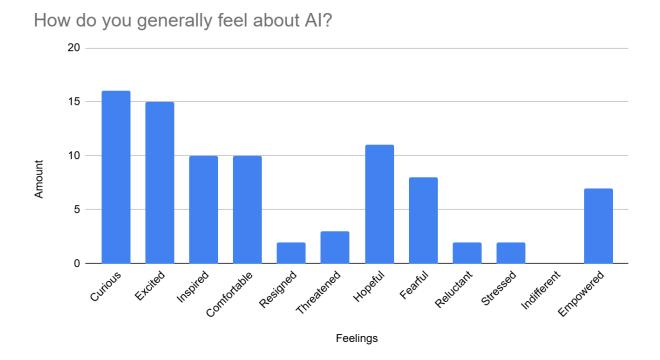
No	Maybe	Definitely
0%	32%	68%



Again, this is the only group with no respondents in "no" AI tools future usage and with the highest for "definitely" more AI usage.

QUESTION 9 -5 items- Degree of interest in AI usage. Consistent with previous frequency usage and future use plans, this group scores the highest positive interest in AI usage in general (96%) and also the highest nuanced degree in that interest positiveness range (48%). Accordingly it is the only group with no respondents uninterested and scores only 4% of those who are not really interested but resigned to using it.

QUESTION 10 -13 items- General feeling about AI. Respondents could choose as many options as desired among a range of feelings towards AI usage, 5 of which offered positive connotations feelings and 5 negative ones, and the participants could add feelings of their own to better describe their moods. This is the only group where no respondents have added any feeling to the list provided in the survey, neither negative nor positive. They have given 69 positive feelings replies with **curiosity** as the **highest** scoring feeling (64%), in total alignment with the rest of the groups, followed by **excitement** (60%). As for <u>negative feelings</u>, there were 11 replies, 8 respondents felt **fearful** and only 3 **threatened**. This is the only group where **no one felt indifferent**, aligned with their replies in previous questions as frequency of usage, interest and future usage plans. And only 2 (8%) feel **resigned**.



QUESTION 11 -5 items- Kind of data willing to share. This is the group with the biggest majority of respondents willing to share their own teaching /training /management content (92%) followed by those willing to share the tracking of learners' activity (36%), almost just as much as the Irish group. A surprisingly big 28% would not object to sharing their personal data, which falls to 8% when it comes to sharing that of students.

QUESTION 12 -10 items- Awareness of AI terms. The 25 participants assessed their level of awareness regarding ten key concepts associated with artificial intelligence (AI). Respondents were asked to rate their familiarity with each term using a five-point scale: 1 Fully Aware, 2 Heard of it and partial understanding (somewhat aware), 3 Heard of it but limited understanding (little awareness), 4 Not sure have heard of it (barely aware), and 5 Not Aware at All. The findings reveal notable variation with the previous three groups of French, Irish and Spanish respondents.

High Awareness Terms

- **Hallucinations** was the most recognized term in this group, with 13 respondents Fully Aware—unlike the larger samples, as mentioned, where it fell right in the opposite degree of the awareness spectrum.
- **Misinformation and Manipulation** also scored high with 12 Fully Aware and no respondents in the "Not Aware at All" category, which falls in the same level of awareness as with the previous groups.
- Biases, Privacy and Security Concerns, and Over-Reliance on AI had steady awareness, with 9 to 11 Fully Aware and very few respondents unfamiliar with them, in line too with French, Irish and Spanish.
- **Machine Learning** showed good coverage overall: 9 Fully Aware, 12 Partially Aware, and almost no unfamiliarity, indicating a more solid general understanding of this core concept in this group.

Moderate Awareness Terms

 Environmental Impact and Ethical Concerns had relatively high awareness but also some variation, with a few respondents indicating they had not heard of these terms.

Low Awareness Terms

- Lack of Explainability had the lowest number of respondents who were fully aware, 3, but a significant portion of 10 partially aware, and 10 limited understanding.
- Legal and Regulatory Conditions showed a balanced spread, with a majority either partially aware or having limited understanding—only 6 were fully aware. This may suggest that more technically minded respondents that are more fully aware of specialized terms used in AI, as this summary shows, are less familiar with broader or more legal terms surrounding AI.

These are the terms that had **the most Fully Aware** recognition in decreasing order, with the number of respondents and the percentage within the mixed EU group:

- Hallucinations: 13 - 52%

- Misinformation and manipulation: 12 - 48%

- Biases: 11- 44%

- Environmental impact: 10 - 40%

- Machine Learning: 9 - 36%

And these are the items that had **the Not Aware at All** with their numbers:

- Biases: 3 - 12%

- Hallucinations: 2 - 8%

- Environmental impact: 2 -8%

QUESTION 13 -free writing contribution- *Ethical issues.* Out of 25 varied European respondents, 16 contributed their thoughts on whether there could be ethical issues when it comes to the use of AI for educational or managerial activities. Their concerns appear below grouped by categories 1-5:

1. Privacy and Data Protection	- Sharing personal data is unethical. Also, all the information must be double checked from different sources before adding it to training materials.
2. Bias and Misinformation concerns	- The key point here is that the person writing the prompt must be competent in their field and have a clear understanding of what they want from the AI.

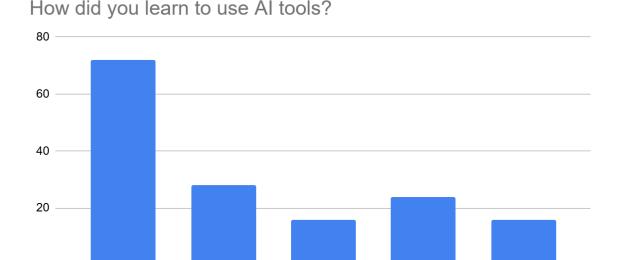
	-If someone without a background in this area relies solely on information generated by Al—or more precisely, by LLMs—to create materials and develop activities, ethical issues will arise.
3. Intellectual Property	-The collection and resale of data.
4. Source Reliability	-Lack of scientific and evidence based information.
5. Loss of Control	- Al will rely on precisely defined algorithms, but in real life it is not so.
6. Cognitive impacts.	 On quality of thinking: Replacing scientific/methodology approach with most liked common sense. Replacing ideas and argumentation with visuals and emotions etc.
7.Environmental impact.	- Carbon footprint (e.g. 1 chatGPT request # 1,5 gram of carbon), Water footprint (e.g. water to cool servers), Energy footprint (for servers, IT programs, IT requests), Bounce Effect (more accessible AI => more usage => acceleration of Environmental and society systemic damages; Deepseek is in that sense a disaster; producing hardware is also a disaster of rare earth elements as a "deal" between US and Ukraine)

As with all the other groups, where there were always one or two respondents that did not see any ethical issues or allowed for very minor concerns, there are a couple respondents in the EU group that do not see any problems. However, in line with previous results, most are concerned mostly about the two categories: Loss of Control and Privacy and Data Protection. And there is an interesting additional category raised by one respondent that had not been mentioned earlier. The ethical use of AI in relation to resources consumption, some of them finite, like huge amounts of water and electricity.

• SECTION 3 **Needs** Questions 14-16

QUESTION 14-5 items- How was AI usage learning. Not surprisingly, EU countries respondents, already known to be the group with more technical skills abilities and younger age, turns out to be the one with the highest score for **self-taught AI usage learning: 72%** while at the same time they are also the ones

that have more schools or organizations formal courses offered with 24%. There seems to be more institutional support towards AI use learning in this group and at the same time, more respondents willing to learn on their own. Also, in consonance with previous data in other sections, this is the group that has the lowest percentage of people who have **no training**, at 16% (exception be made on the French respondents who presented a more technical profile and had the lowest "no training " score at 8.7%). Despite previous differences, the EU group falls in line with all the rest and assigns almost the known third to the option of "still have a fair amount of learning to do" (28%)



I have no training

and I don't feel

very confident

and hardly use

ΑI

My

school/company

has organised Al

usage courses.

I rely on my

colleagues at

school/work to get tips and

auidance.

QUESTION 15 -14 items- Frequency of AI tools usage. The data reveals how frequently 25 respondents use AI tools across 14 different educational or professional tasks, and graded on 5 usage frequency levels: **always**, **often**, **sometimes**, **rarely**, **never**.

The tasks that reveal the **most frequent use (always and often)** are these, followed by the number of respondents that have chosen them and the percentage their represent:

- Develop multimedia content: 16 - 64%

I learnt by

practicing on my

own, without any

formal instruction. about Al usage.

- Create innovative learning/training materials: 16 - 64%

I still have a fair

amount of

learning to do

- Search and provide feedback on tools/resources/methods: 15 60%
- Help in a variety of managerial tasks: 14 56%

Having established that this group is the most tech oriented, according to previous questions' replies data, it is coherent that **the most frequent use** most of them make of AI tools for educational purposes is **to develop multimedia content and create innovative learning materials.** Both tasks are also related to being up-to-date on the latest resources and methodologies to create said teaching or training content and require good technical skills.

The tasks that reveal a **moderately frequent use** (sometimes) are these:

- Create extra materials for learners that need further practice: 13 52%
- Write up reports for administrative tasks: 13 52%
- Generate lessons plans: 10 40%
- Adapt materials for learners with special needs: 10 40%
- Simulate labs and hands-on exercises: 10 -40%

The tasks that reveal a **less frequent use (rarely or never)** are these:

- Grade exams in different formats (multiple choice, short or even long answers): 8
- 32%
- Create evaluation materials: 8 32%
- Use tracking to give students feedback: 8 32%
- Track learners' performance: 7 28%

Following the reasoning above, a higher use of tracking tasks (both detection and feedback) could be expected by this group because access to the tool and usage skills do no seem to be an issue, so it might fall in this lower use frequency due to ethical concerns or data protection constraints.

QUESTION 16 - free writing contribution- Other tasks you would like an AI to do for you. 9 out of 25 contributed, 4 of which did not have any further request for the AI to do other education-related tasks for them. This is what another one mentioned:

- Sort out files, convert into excel all sort of different data.

And the rest, rewrote already mentioned tasks, and an optimist required the AI to "planing my preparation for the gym".

• SECTION 4 **Expectations**

Questions 17-18

QUESTION 17 -8 items- *Support needed to learn AI usage.* Since respondents could choose **multiple options**, percentages may exceed 100%.

- The top 3 preferences selected are tied with 48% and favour distance learning:
 - Interactive online course.
 - General guidelines or manuals.
 - Access to specific tools.
- Not so far from distance learning comes:
 - Face-to-face training: 44%
 - General support (AI or IT expert available for consultation): 40%
- And in the last positions appear:
 - General support (extra planning time): 20%
 - Infrastructure: 12%

And one additional contribution stating a preference for: "Guidelines should be focused on **Frugal AI**". Frugal AI is about maximizing efficiency while minimizing resource consumption across all facets of AI systems, a very interesting and necessary approach in view of the hight environmental cost of AI development and implementation.

QUESTION 18 -7 items- *Perceived AI influence on different activities.*Respondents have graded their perception of the influence that AI usage could have on different educational activities and here is a summary of the activities followed by the number of respondents who have chosen that level of influence:

High influence	Intermediate influence	Low influence
- Make learning interactive more interactive with virtual assistants, chatbots or	- Help with adapting content to diverse learning paths: 10 - 40%	- Comply with data/security laws: 8 - 32%
gamified learning: 16 - 64% - Perform repetitive	- Personalise learning experiences by customizing	- Analysis of teacher/trainer methodology to optimise instruction strategies: 5 -2%
managerial tasks: 16 - 64%	learning paths: 10 - 40%	
- Help with adapting content to diverse learning capacities: 14 - 56%		
- Perform repetitive teacher/training tasks such as keeping records: 14 - 56%		

This is the only group that has not assigned low influence in two activities, and in those activities that they did assign a low influence prospect, the respondents are in line with previous groups in choosing "comply with data/security laws". They are also in line with the first high and intermediate influence activities selected.

7. Conclusions

The findings presented in this report are based on the analysis of 197 survey responses collected from a wide spectrum of education professionals, some of which are:

- Primary, Secondary and VET teachers.
- Teachers in Special Education.
- University professors and researchers.
- Digital Learning Professional (educational engineer, project manager)
- Instructional Designers and creators of innovative content.
- Digital Learning Technical professionals (graphic designers, developers, tutors in e-learning.

In compliance with **AIRED** project proposal, the project partners created a survey to gather quantitative and qualitative data on the above target audience: their **profiles and usage of AI tools** in a variety of education related tasks, as well as

their **concerns** of such use, their **perceptions**, **needs** and **expectations**. We managed to **exceed the number of surveys required by the project by 31.33%,** which gives the findings more scope and enriches the samples contribution to our search for relevant data.

The majority of respondents represent the partner countries involved in the project—**France, Ireland,** and **Spain**—while additional insights were provided by participants from **Germany, Greece, Italy, Norway,** and **Portugal**. This diverse input offers a valuable overview of current perspectives on the use of AI tools in education, highlighting both common trends and context-specific differences across regions. The conclusions that follow aim to summarize key observations, emerging concerns, and potential directions for future practice and policy.

Section 1 You and your role. Questions 1-6

Q.1 The role of Primary, Secondary or VET teacher is the one that has been selected more frequently by respondents, 50.44% of times, followed by that of Teacher-Researcher in Universities and HEIs with almost 15%. Content creators come in third position at 8.33%. Respondents could choose up to 3 different roles.

	Number of times professional roles 1-8 have been selected by 197 respondents: total 228 selections						
	Professional role in education	FR	IR	SP	EU	Total	%
1	Teacher in Primary, Secondary, VET.	2	34	73	6	115	50.44%
2	Trainer who designs and runs training sessions in companies, training centres, or private academies.	2	0	8	1	11	4.82%
3	Teacher-Researcher in Universities and Higher Education establishments.	23	1	7	3	34	14.91%
4	Instructional Designers creators of educational content and training programmes using innovative educational methods.		0	10	5	19	8.33%
5	Professional Coach, Corporate Training Facilitator, skills development workshop and seminar Facilitator.		1	4	0	6	2.63%
6	Teacher working in Special Education Needs, such as learning disabilities.	1	11	1	1	14	6.14%
7	Digital Learning Professional: educational engineer, project manager, etc.		0	2	6	12	5.26%
8	Digital Learning Technician: 2D and 3D graphic designer, integrator, IT developer, videographer, e-learning tutor.	5	0	3	9	17	7.46%
	Total number of selections						228

The distribution of role selections highlights a **strong concentration around Role**1, which accounts for over half (50.44%) of all choices made by respondents. Role 3 follows at a considerable distance (14.91%). This distribution of roles in our survey samples may be consistent with and reflect the broader structure of the education system, where there are far more students and professionals involved in the earlier stages of education than in Tertiary education. The number of students in the EU between Primary and Upper Secondary in 2020 was around 61 million while that of post-Secondary to Tertiary was 19.4 million (Eurostat report of 2020 https://ec.europa.eu/eurostat/web/products-eurostat-news/). All other roles individually represent less than 10% of total selections but were nonetheless present and covered all the target audience representation that we were looking for, resulting in valuable data for the project's purpose of reaching out to a variety of professionals involved in educational activities.

Q. 2 The overall average age of the 197 teachers surveyed is approximately 43.2 years. This reflects a relatively experienced respondent base, with contributions from professionals at different career stages, with younger educators in their 30s (and quite exceptionally, the 5 teachers in the Spanish group under 20, who must be instructors or trainers of some kind which they did not specify in the role (any question 1) since with the current studies plans one cannot become a teacher until around 22 years of age) to those in their late 40s. This age distribution may have an impact on attitudes toward AI tools in education. On one hand, experienced teachers may bring valuable pedagogical insight and critical thinking to the adoption of new technologies; on the other, they may also face steeper learning curves or express greater caution toward rapidly evolving digital tools, as other sections in the survey reveal (any section 2 question 7, 9, 12,15). Understanding this generational balance is important when designing professional development and support strategies aimed at encouraging meaningful and confident integration of AI in educational practice, which is the final aim of AIRED project.

Q. 3 As regards gender, there are 103 women, 84 men and 10 respondents who preferred not to specify. The gender distribution among the 197 surveyed teachers shows a slight predominance of female respondents, who represent 52.3% of the total. Male respondents account for 42.6%, while 5.1% preferred not to disclose their gender. This balance reflects the broader trend of a higher proportion of women working in the education sector, particularly in primary and secondary levels. The presence of respondents who chose not to specify their gender, though relatively small, is probably pointing to a growing trend and highlights the importance of offering inclusive and respectful options in data collection.

- Q. 4 The average time spent in the professional domain of educational activities amounts to 14.5 years. Considering that the average age of the respondents is 43.2 years, we get an average of 28.7 years of age when respondents started working on education related tasks. This average used to be lower in past decades, but there is now a trend observed that a significant percentage of graduates pursue a master's degree before entering the workforce. This might be the case in the EU countries group, who were younger (34.1 average age) and had the lowest work-time average (9.6 years). These figures give us an average of 24.5 years of age when they start working, which totally fits the time required for graduation (around 22 years of age) plus the 2.5 approx years to get a Master's degree to qualify for the teaching profession.
- Q. 5-6 The average number of learners per session and per year varies significantly across educational levels and professional roles, reflecting the distinct teaching environments and structures within each context. Our respondents in Higher Education Institutions (HEIs) report the largest group sizes, with an average of 47 learners per session and approximately 260 per year. This is consistent with the typical HE setting, where lectures are often delivered to larger cohorts and teaching is less frequent but more concentrated in time.

In contrast, **digital learning professionals report smaller session sizes—averaging 25 learners per session and 140 per year**—likely due to the more targeted or specialized nature of their training sessions, often delivered in workshops or short courses, possibly across a diverse range of professional sectors.

Primary, Secondary, and VET educators report the smallest groups, averaging 20 learners per session and 104 per year. This is in line with more structured and continuous teaching throughout the academic year, where teachers work with the same students regularly in smaller, more stable groups. These differences are important to consider when evaluating the implementation and scalability of AI tools, as group size and teaching context can significantly influence how such technologies are adopted and used in practice. And specially how their usage can be supervised by the teacher or trainer to avoid encountering the issues that concerned educators (any Section 2, question 12).

Section 2 Perceptions of Al. Questions 7-13

Q. 7-8 The frequency of AI tools usage is similar in three groups (France, Ireland and Spain, although almost 10 percentage points higher in the French group over the Irish for a weekly usage) and clearly varies in the fourth group, that of the respondents from 5 other EU countries, whose average age is also lower, at 34.1. This correlation that has been mentioned earlier about younger professionals being more prone to adopt new technologies in their teaching

methodologies may be working here, but the average age of French, Irish and Spanish teachers is similar and there are differences, specially on the "never" frequency use, which, as mentioned in 4 Section 2, Perceptions of AI, may be due to the role of the Irish teachers speciality working with special needs learners.

France Average respondents' age: **47.1** and frequency of Al usage

Daily	Weekly	Monthly	Rarely	Never
11.4%	42.85%	11.42%	31.4%	2.85%

Ireland Average respondents' age: 46.6 and frequency of AI usage

Daily	Weekly	Monthly	Rarely	Never
23.1%	30.8%	12.8%	7.7%	25.6%

Spain Average respondents' age: 47.2 and frequency of Al usage

Daily	Weekly	Monthly	Rarely	Never
25.5%	37.7%	15.3%	18.4%	3.1%

EU countries Average respondents' age: **34.1** and frequency of Al usage

Daily	Weekly	Monthly	Rarely	Never
48%	36%	4%	12%	0%

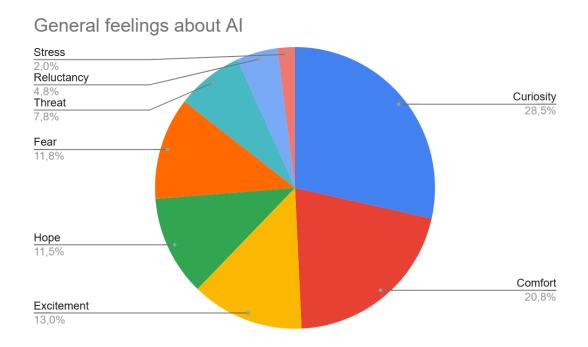
All the above falls totally in line with the **planned use of AI in the future** that respondents have in mind, with French, Irish and EU ranging between 65-68% "definitely" option and Irish favouring the "maybe" with 48.7%, while the "definitely" for the Irish gets almost half the intentions as the other groups and stays at 38.5%.

Q. 9 Accordingly, the degree of interest in using AI tools for educational activities also follows the same pattern for three groups, with the EU components showing the highest percentage of interest (96%) closely followed by French and Spanish at 90%, and with Irish spiking up to 88% in interest but maintaining a 12% not interested (a few points over the French and Spanish). Again, coherently so far, the only group where no-one showed no interest is the5 EU countries group. Overall, there is an immense amount of interest in AI tools among the educational community. This high level of interest suggests a strong openness and eagerness to explore and potentially adopt emerging

technologies (as mentioned in Section 3 Needs, question 14, where the majority of respondents had spent their own time and efforts to acquire AI usage skills).

It also reflects a growing awareness of AI's potential to support teaching and learning processes, from automating routine tasks to enabling more personalized learning experiences (any Section 3, question 15). This interest also underscores the need for targeted training and institutional support to ensure that this good disposition towards AI can translate into confident and effective use of AI tools in educational practice and overcome concerns that are also ever present (as seen in any Section 2, questions 12, 13).

Q. 10 As a logical follow up on this positive interest on AI tools for the learning, there is also an overall positive feeling towards AI tools in the respondents. Curiosity is the king (picked up 114 times), followed by comfort (83 times), excitement (52 times) and hope (46 times). On the downside, but far from the picks of positive connotation feelings, there appear in the negativ spectrum: fear (47 times), threat (31 times), reluctancy (19 times) and stress (8 times). There is probably no respondent that has selected either all positive or negative feelings; rather, most showed a mix of both. However, the weight very clearly falls on the side of a positive disposition toward AI (as the diagram on the next page illustrates), suggesting that while some concerns remain, the general mood is one of openness, interest, and readiness to engage with the opportunities AI offers in education, with 73.75% of all respondents having selected any or several of the 4 positive feelings in contrast with 26.25% that chose a negative connotated one or ones.

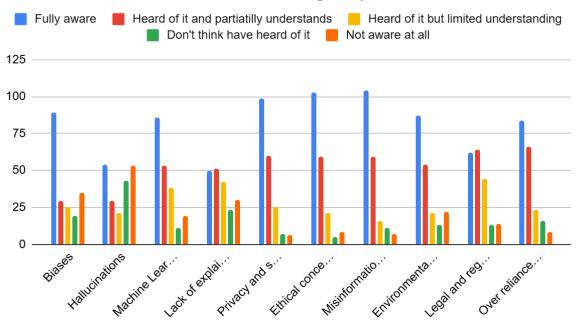




- Q. 11 PThis prevalent trend in the data related to current high frequency use of AI, high rate of future AI use plans and generally good feelings about AI use, does not come without certain precautions. When reflecting about **data sharing**, respondents are willing to share only certain things with the AI. There is a clear majority that will not object to sharing their own teaching/training/management content (between 71% of French respondents to 92% of EU ones) but there is a 40-50 percentage point drop when it comes to sharing students performance using tracking devices. This contrast highlights a distinction many educators make between professional transparency and a generous sense of common efforts on the one hand, and the ethical responsibility to protect student privacy on the other, and suggests that while teachers are generally open to contributing their own materials to support AI development or functionality, they are far more cautious about sharing data that involves learners, particularly when it comes to performance metrics gathered through automated means. This hesitancy surely comes from concerns about surveillance, data misuse, bias, etc. (as seen in any Section 2, question 12) and the potential impact on students' rights and well-being. These are issues that call for clear guidelines, transparency, and trust in the systems being implemented.
- Q. 12 This reluctance to share learners' performance data may stem from respondents' growing awareness of various concepts related to AI functioning and usage. A strong consensus emerged around key concerns such as ethics, misinformation, manipulation, privacy, and data security, which were the most widely recognized terms among participants, particularly in the French, Irish, and Spanish groups.

In contrast, terms associated with the **more technical** dimensions of AI, such as **biases**, **hallucinations**, **machine learning**, **and regulatory frameworks**, **were less familiar** to these same groups. In the compiled chart below, we can see that "biases", "hallucinations" and "lack of explainability" score high on the "not aware at all" level (in orange) compared to the low "not aware at all" level that appears on "Privacy and security", "Ethical concerns" and "Misinformation and manipulation", which in turn score the highest level of full awareness (in blue).

Level of AI terms awareness among respondents



This distinction aligns logically with other data we have commented so far: the 5 EU countries group, which tended to be younger and more technically oriented, showed higher levels of awareness specifically around the more technical AI concept terms. This suggests that professional background, age, and digital familiarity may play a significant role in shaping educators' understanding of AI, not only in terms of what it can do, but also what risks and responsibilities its use entails. This highlights the need for training courses that are specifically tailored to participants' existing knowledge of AI as well as their intended use of the technology, whether for methodological support, differentiated learning, content creation, or administrative and management tasks, among several others that are part of the educational field activity.

Q. 13 Respondents contributed freely with further ethical issues concerns when using AI for education, the ample majority of which had to do with the aforementioned privacy and data protection, bias and misinformation. Another general concern was that of intellectual property and the reliability of the sources. There was too spread concern on the cognitive impacts on learners and the loss of control. Not quantitatively representative but very interestingly because of the implications, there were a couple of additions about the labour exploitation and precarious conditions that annotating data for AI entails as well as the concern for the environment due to an intensive use of resources (electricity, water, land space for massive data centres).

It is clear that the educational community is concerned about a variety of issues that should be addressed in any sort of course devised to encourage AI tool use because **building trust**, **ensuring ethical awareness**, **and aligning technological integration with real classroom needs** are essential for meaningful and responsible adoption. Without addressing these concerns, ranging from privacy and data security to misinformation and ethical risks to AI impact on human work and the environment, educators may hesitate to engage fully with AI, regardless of its potential benefits.

Since the additional contributions of the respondents are varied and enriching, they appear as annexes in this report.

Section 3 Needs. Questions 14-16

Q. 14 As mentioned above in passing, the great majority of respondents have learnt **how to use AI tools** on their own, without any formal instruction. Up to two options could be chosen since it is likely that more than one mode of learning could have overlapped in time, and overall percentages may exceed 100%.

	Learnt on their own	Learnt in a course	Have no training and no confidence in Al use
FRANCE	68.5%	11.4%	11.4%
IRELAND	51.3%	18%	25%
SPAIN	61.2%	17.3%	20%
EU COUNTRIES	72%	24%	16%

The data clearly shows how professionals in education have committed their time and efforts to learn about AI tools use on their own. This grassroots adoption of AI tools, where teachers take the initiative to explore and learn independently, is most likely due to the lack of structured support on the part of education authorities or organizations, which may be the case in Spain, but it is less likely so in the EU countries group. A deeper analysis on respective EU countries investment, variety and availability in AI courses for the education sector is ready available in the respective National Reports that appear in WP4 of this project, although these insights refer only to the project's partners countries.

Acquiring new complex skills to integrate the digital domain and particularly AI tools in professional education practice is already hard enough, even attending a course, given the breaking ground we are contemplating. Al's use implies so many ramifications and entails such a vast scope of both opportunities and threats that it is very difficult to navigate it alone, without properly structured and

supported training, which leaves us with almost a quarter of the respondents, in some cases, unskilled and with no confidence in AI use.

For those who have made the effort to learn on their own, there should be some sort of **validation** in the form of **micro-credentials**. There could be courses adapted to different levels of AI use knowledge so that education professionals could obtain recognition. There is a clear need to offer access to structured AI **training**, especially in countries like Irealand and Spain, where a substantial portion of teachers remain untrained. This would help to avoid unequal learning opportunities for professionals, which in turn result in inequities for the learners. Notably, even in the most supportive context (other EU countries), only about a quarter of respondents gained AI skills through a course. The data highlights an urgent need to expand structured training opportunities and provide targeted support for those who currently lack both skills and confidence. This is especially important for ensuring equitable access to Al's potential benefits in education, which respondents also mentioned in their personal contribution comments and which also appear in their generally very positive attitude and feeling towards AI, and avoiding the development of a digital divide within the teaching workforce.

- Q. 15-16 After the efforts of education professionals to learn about AI tools use, there comes their integration in different education tasks. The survey captures the frequency and the type of tasks carried out using AI. Here is a summary of the findings relevant to all respondents and countries:
 - In the always-often frequency range we find that all countries use AI for supporting and enriching learning content (create extra materials for further practice, create innovative learning/training materials), with the particularities that Spain and other EU countries show stronger emphasis on multimedia and innovative materials. France is most prominent in using AI for evaluations (54%), while Ireland lags here and Ireland and other EU countries use AI relatively more for managerial and administrative support than France or Spain.
 - In the **moderate frequency** (sometimes), all countries agree to **generate lessons plans.** And 3 countries, France, Spain, and EU countries agree on **adapt materials for special needs and simulate labs.** There is also **administrative reports**: moderately used in Ireland and EU countries (but rarely in France).
 - In the **less frequent** use we see a common trend too in all countries as regards tracking and data analytics tasks, with a consistently low

engagement across countries, in line with other previous data regarding awareness on privacy issues.

Assessment grading via AI (in different formats: multiple choice, short or even long answers) is more common in France, but underused elsewhere, which suggests potential concerns with reliability or trust. There may be accountability or personalization concerns about using AI tools for creating reports since it also falls in the less frequent category.

In brief: content creation and pedagogical enrichment are the most common AI use cases across the countries. Tracking, grading, and performance feedback remain underused, likely due to trust, ethical, skills or infrastructure concerns. Spain and EU countries show a greater tendency to integrate AI into multimedia and innovative materials, while France leans more into AI for assessment, of which Ireland presents the most cautious use.

Any course or policy aimed at addressing the varied uses of AI tools could make a meaningful impact if it focuses on showcasing the full potential of this technology, not only to enhance the tasks teachers already engage in, but also to encourage the adoption of underused or unexplored applications by addressing the underlying reasons for their limited use.

Section 4 Expectations. Questions 17-18

Q. 17 If given, this support to learn AI usage in an organized way has the following preferences, expressed by country, and taking into account that respondents could choose multiple options, percentages may exceed 100%:

Face-to-face training: preferences ranged between 38.8% (Spain) and almost 70% (Ireland). **This type of course is preferred over online courses only in France.**

Online interactive courses: Ireland also favoured this option with the highest preference at 74.4%, while France chose it in the smallest proportion with 51% of respondents. This type of course is preferred over face-to-face in Ireland, Spain and EU countries.

Respondents show a preference for online courses. However, face-to-face training is also highly valued, which suggests that despite the digital nature of AI tools, educators appreciate human interaction, structured guidance, and real-time feedback when learning to use them. Nevertheless, interactive formats are also widely favored, which hints at a growing openness to flexible, autonomous training options or at least a very similar preference for both formats. Perhaps blended learning would suit everybody's needs: part in presence, part online.

Q. 18 As regards the perceived influence of AI in improving teaching/learning/management in different activities, respondents widely agreed that the highest influence would be on helping learning become more interactive and on easing repetitive tasks, hence the need to support educators with course content and skills to enable them to perform these activities.

A moderate influence was generally assigned to tasks such as the analysis of teacher/trainer methodology to optimise instruction strategies and personalise learning experiences by customizing learning paths, pointing at a limited exposure to effective models or concerns about complexity and trust in algorithmic decisions. This shows the need for professional development focused on pedagogical uses of AI and hands-on examples.

There was **total agreement** too on assigning a **low degree of influence of AI tools** in the tasks of **complying with data and security requirements and laws.** Educators may see these responsibilities as outside AI's useful scope or too sensitive for automation. This reflects realistic expectations about the role of AI and a need to separate instructional benefits from administrative/legal obligations, which may entail undesired consequences if not totally controlled by human supervision.

All in all, with the data gathered in the surveys we can draw the **general profile of the teacher/trainer/manager using AI tools** as a female in her forties, in non-tertiary education, with a strong commitment to put her time and effort in learning about AI tools for educational purposes demonstrated by the fact that she has learnt on her own, who feels a great deal of curiosity about what these tools can offer, mixed with fear for concerns over ethical issues and privacy and security aspects, but who is willing to keep on learning about it in an online course preferably, so that she can be more aware about technical terms such as bias, hallucinations and Machine Learning and keep on using AI tools frequently, as she has positively planned to do in the future, to create materials to make her lessons more interactive and also avoid repetitive tasks in general.

It would be a sad missed opportunity if education authorities and organizations lacked the will to offer courses aligned with the needs and expectations that a varied sample of education professionals have expressed. Professionals that have already embraced, more often than not at their own expense of time and effort, AI technology and salute the benefits it can bring into their classes but who, at the same time, are in need and eager for further instruction. The better the education professionals are formed in AI, the better the learners will be off and the more equal opportunities may arise for all.

As a global society, we are witnessing an arms race for dominance in the emerging Web 4.0 era, primarily between two major contenders: the United States and China. This competition is over 5 key technological domains: cloud computing, AI, robotics, 5G, and quantum computing. We, as part of the education community in our varied roles, stand at a crossroads as potentially beneficiaries or casualties of the changes this struggle brings. With deeper and more informed engagement and instruction in these technologies, specially AI tools for educational use, we may have a small but crucial opportunity to shape our role in this ever evolving scenario.

8. Annexes

FRENCH free writing contributions on question 13 about ethical issues in AI tools use. A selection:

- Yes intrusion into private life use of personal data commercial canvassing
- We need to ensure that what we obtain is completely neutral. Given that an AI can be trained (there have already been cases of AIs ending up with biased or even dangerous discourse, depending on how the question is phrased), ethical risks are entirely possible.
- Data protection, copyright.
- Ethical problems linked to the use of technologies or the leakage of sensitive information to high-risk countries, e.g. Chinese AI that refers to the national discourse of the party in power. Could become a tool for untruths, disinformation and intelligence.
- The generation of courses and teaching aids without any control over the sources and veracity of the courses generated. I recently heard about an art history teacher who generates the images and texts for these courses. For art history, generating images is the last straw.
- -Yes, not having any control over the knowledge transmitted. Let AI service providers choose the content they broadcast.
- -Yes, there's a risk of ready-made thinking, and I think it's dangerous to delegate an intellectual task to a machine.

- -Yes, particularly because such use can lead to plagiarism.
- -Yes, it's a question of producing work that comes from oneself with the assistance of AI and not the other way round. The decline in the quality of information and the use of a variety of sources, then the replacement of individual reflection in favour of solutions provided by AI.
- -Excessive surveillance, unintentional use of data, difficulty in assessing skills due to misuse, etc.
- -Are teachers still the 'source' of knowledge, or are they relying too heavily on AI to replace them in their core business? What can we teach students (what limits should they be given in their future use of AI as professionals)?

IRISH free writing contributions on question 13 about ethical issues in AI tools use. A selection:

- Work not students own
- Inputting of personal data, particularly when it relates to children.
- I'm not sure about these particular fields, but I feel that AI can be used to manipulate information to suit the bias of the disseminator.
- Yes of course, and I feel that teachers need to take a "common sense" approach with what information is shared with AI platforms. Absolutely no school attainment data or student information should be shared with AI systems.

GDPR, and acquisition of knowledge for the individual student as opposed to knowledge of how to generate information through the effective use of AI.

- For completion of Projects in the Leaving Cert.
- Humans should be able to make decisions, not rely on the AI to make the decision for them.
- Depends on the activity but generally speaking if you require critical analysis as demonstration of learning, it is not currently achieved through AI which tends to respond with a list of 'factoids'. Unless bias / inaccuracy etc etc are removed it is a pointless exercise and veers towards robbing human participants of independent thought.
- People teaching that don't know what they're doing

- Yes, many of my students are presenting AI work as their own when clearly it is not
- Not if used as source of inspiration, to save planning time or as a colleague
- Yes, because I have students who used AI for projects and pretended they wrote the information all by themselves but it was not the type of language that they usually wrote. I cant accuse them of cheating so that was frustrating accepting work where I knew they did not critically analyse their evaluation themselves for the project but copied AI inspired info.
- Definitely, integrity of exams.
- Absolutely. There is huge scope for hallucinations, bias, privacy and security.

SPANISH free writing contributions on question 13 about ethical issues in AI tools use. A selection:

- -To begin with, a mismanaged or excessive use of AI by students can make them lose the use of critical reasoning to identify what is right or wrong, using AI to solve all their problems, whether in the educational field (assignments, exams, generated entirely by AI, and without checking if it is right and without checking any other source), or in their personal problems (using AI as if it were a psychologist to advise them on how to act in X situations).
- Yes, from my point of view there would be a cognitive deterioration as students will not reflect for themselves and will lose the ability to reason on their own.
- Let the AI decide for us.
- Generation of images from real photographs
- It can change our perception of reality. Failure to make appropriate decisions. Loss of humanity.
- Distortion of values and behavioural conditioning.
- No, as long as it is used as a support tool.

EU COUNTRIES free writing contributions on question 13 about ethical issues in AI tools use. A selection:



- No

- NO

- -A lot. On people: Personal Data etc. On quality of thinking: Replacing scientific/methodology approach with most liked common sense,
 -Insensitivity to sources, Cheating/copy-pasting contents, Replacing ideas and argumentation with visuals and emotions etc.On planet: Carbon footprint (e.g. 1 chatGPT request # 1,5 gram of carbon), Water footprint (e.g. water to cool servers), Energy footprint (for servers, IT programs, IT requests), Bounce Effect (more accessible AI => more usage => acceleration of Environmental and society systemic damages; Deepseek is in that sense a disaster; producing hardware is also a disaster of rare earth elements as a "deal" between US and Ukraine)
- Yes, because AI will rely on precisely defined algorithms, but in real life it is not so... Its qualities are undeniable, but let's not forget that it is not human
- -Teaching with AI and the ethical side of organizing training management activities comes from understanding the connection between AI usage and ethics. As an instructional designer, this knowledge is essential, and it helps us present AI with detailed, yet simple information and create structures and activities that align with this material through appropriate prompts. The key point here is that the person writing the prompt must be competent in their field and have a clear understanding of what they want from the AI. If someone without expertise in the field relies solely on AI-generated more specifically LLMs-generated information to create materials and activities, ethical issues will arise. First, the provided information must always be checked, refined, and adapted to a better form according to the needs. Secondly, sensitive information should never be included as context.

Teaching with AI. The ethical aspect of organizing training management activities hinges on understanding the relationship between AI use and ethics. As competent training material designers, it is essential for us to provide AI with information that is not overly detailed or complex, and to use appropriate prompts to create a structure that fits the material and to develop corresponding activities. The key point is that the person writing the prompt must be knowledgeable in their field and clear about what we expect from AI.