

# Security and Privacy in Academic Data management at Schools (SPADATAS)

2022-1-ES01-KA220-SCH-000086363



**Co-funded by  
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## Teacher questionnaire report

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# Introduction

The report is organized into three distinct sections. The first section provides a summary of the results, laying out a brief overview of the findings. The second section presents a series of graphs, each one visualizing the responses gathered from the questionnaire. The third and final section delves into a thorough analysis of the questionnaire responses to check if teachers:

- Are informed about the school's privacy policies
- Are aware of data privacy problems
- Are trained in digital skills or competencies
- Contact the Data Privacy Officer to solve any doubt, check any data privacy related action, and report any data breach
- Design activities that protect students' data and privacy
- Use technology that ensure students' data privacy

## 1 Summary

In Croatia, Denmark, France, and Portugal, engagement with the Data Protection Officer (DPO) and knowledge of unauthorized data scenarios and breach detection vary significantly. Croatia and Denmark have higher knowledge rates of breach detection, while France displays a full understanding of both unauthorized data scenarios and breach detection.

Despite these variations, a significant majority of teachers are aware of data privacy issues and understand the importance of safeguarding student information. They also demonstrate a grasp of different levels of data risk and data collection tools. However, there's still a need for improvement, especially in countries where a small percentage of teachers exhibit a lack of awareness or knowledge.

The findings emphasize the importance of ongoing training to ensure teachers remain updated on data privacy issues and can protect their students effectively. The results also highlight the need for continuous efforts in offering comprehensive training opportunities and addressing potential barriers that prevent some teachers from enhancing their digital competencies. With the right resources and support, teachers can prioritize privacy and better protect students' data.

In summary, the analysis reveals several gaps in data privacy and security practices, as well as digital competency among teachers, which can be addressed as follows:

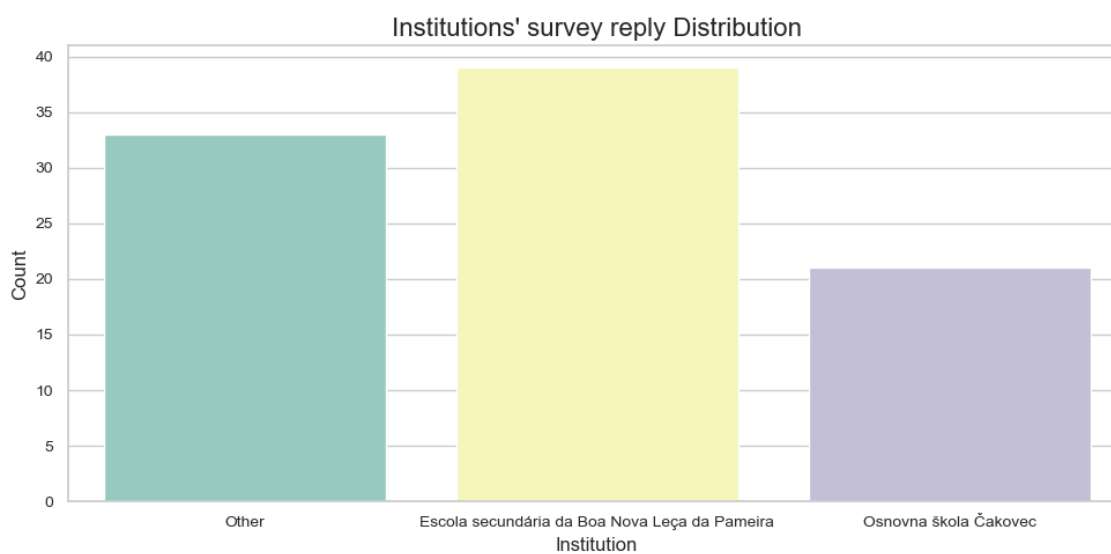
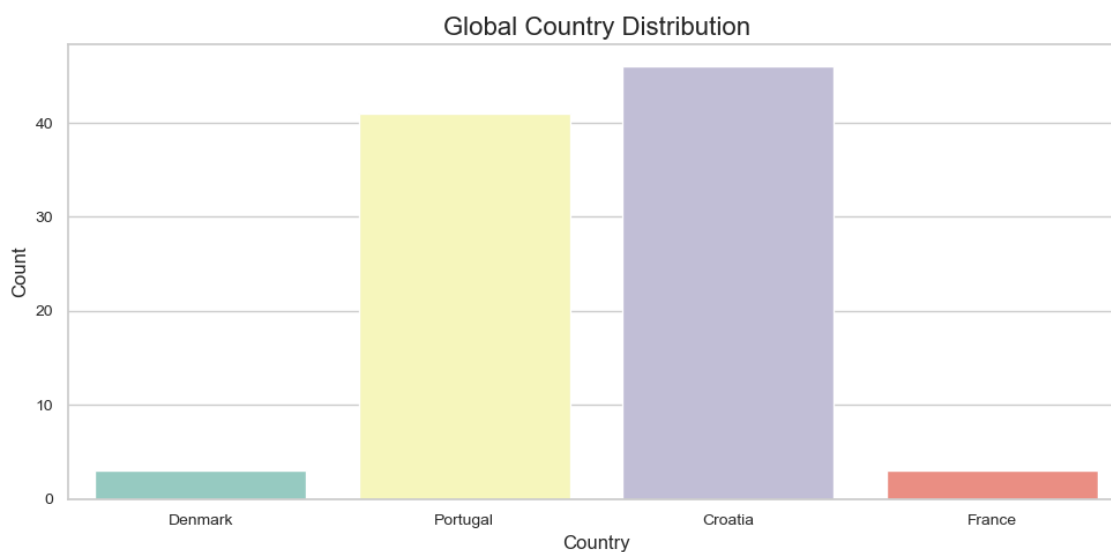
- **Digital Skills Training:** While a significant number of teachers have undergone or plan to undergo digital skills training, there are still teachers who are not interested or have decided against it. More targeted awareness campaigns should be conducted to

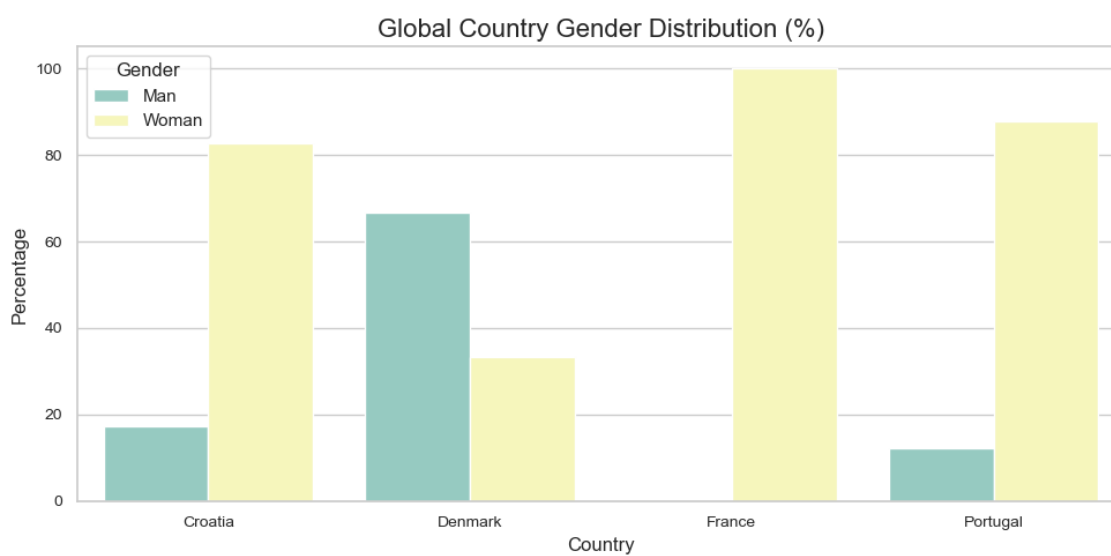
highlight the importance and benefits of this training, and more accessible training opportunities should be created.

- **DPO Contact and Knowledge:** Reporting to the Data Privacy Officer (DPO) for validation is not uniform across countries. More emphasis should be placed on encouraging teachers to utilize the DPO as a resource for any data privacy-related actions or concerns. Additionally, the knowledge of teachers on how to proceed in unauthorized data scenarios and breach detection varies, which signifies a need for more comprehensive training in these areas.
- **Privacy Policies Awareness:** There is a significant disparity in teachers' awareness and interest in the school's privacy policies across different countries. Schools need to take more proactive steps in informing teachers about these policies and motivate them to review these policies regularly.
- **Activities that Protect Students' Data:** Teachers' involvement in designing activities that protect students' data and privacy is inconsistent. There's a clear need for enhancing teacher resources and support in this area, and to further promote the significance of student data protection in their planning.
- **Awareness of Data Privacy Problems:** While there is a high level of awareness among teachers about data privacy problems, there is still a fraction that lacks understanding. Regular educational programs and updates on data privacy can help maintain and further improve this awareness.
- **Use of Technology that Ensures Students' Data Privacy:** Although most teachers use measures to protect students' privacy, there is still a group that doesn't. This points to the need for more rigorous standards and guidelines in choosing and using technology for teaching, especially those that prioritize data privacy.



## 2 Graphs

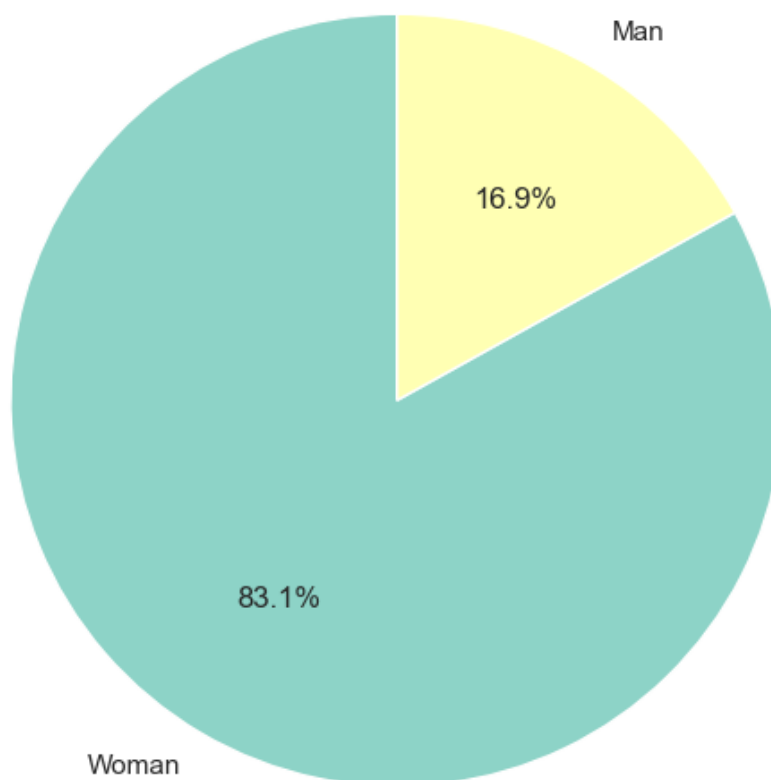




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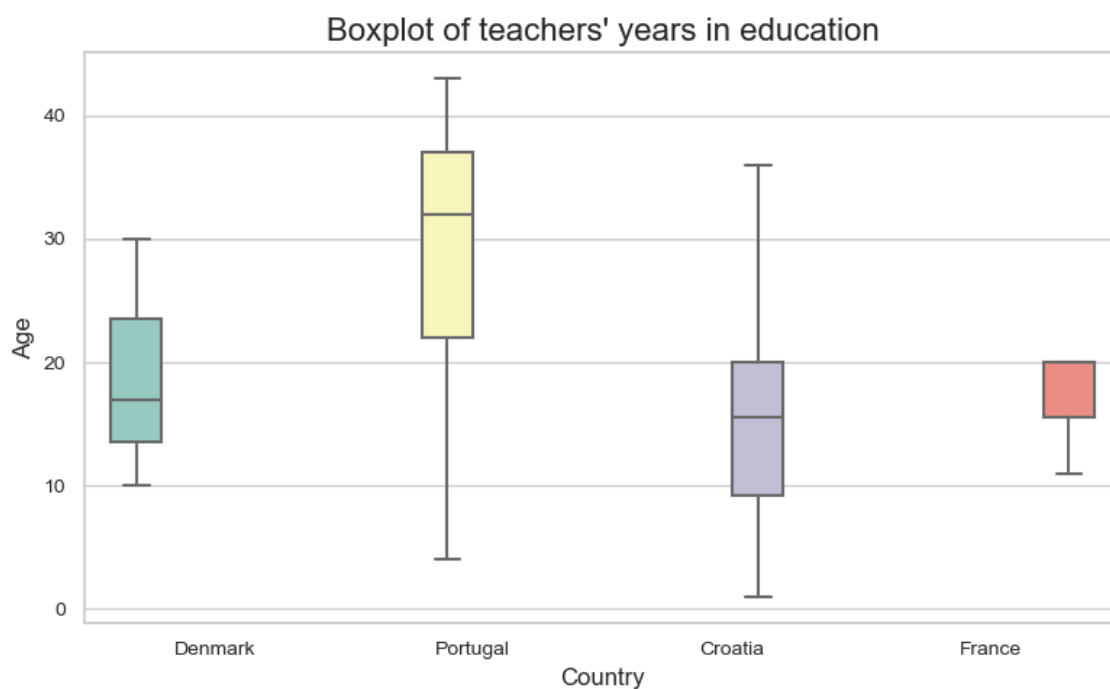
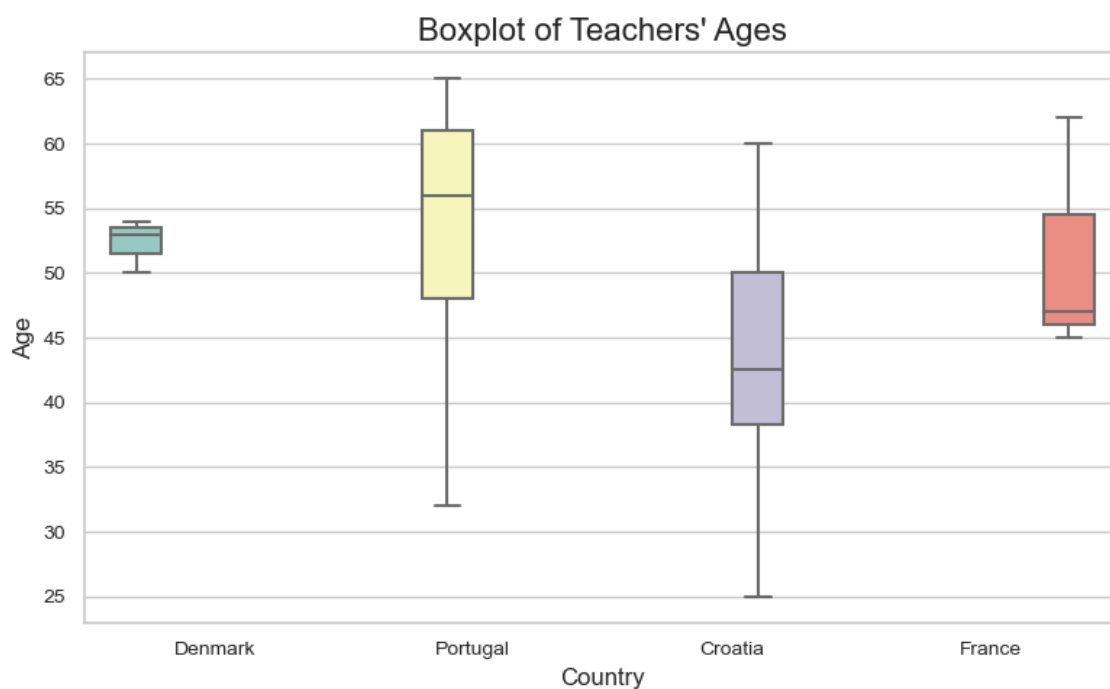
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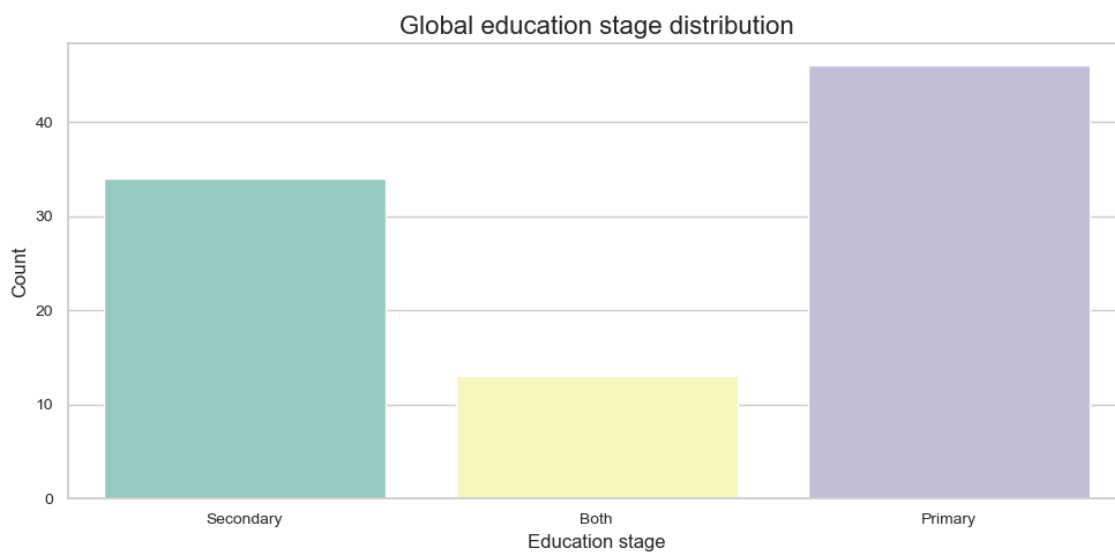
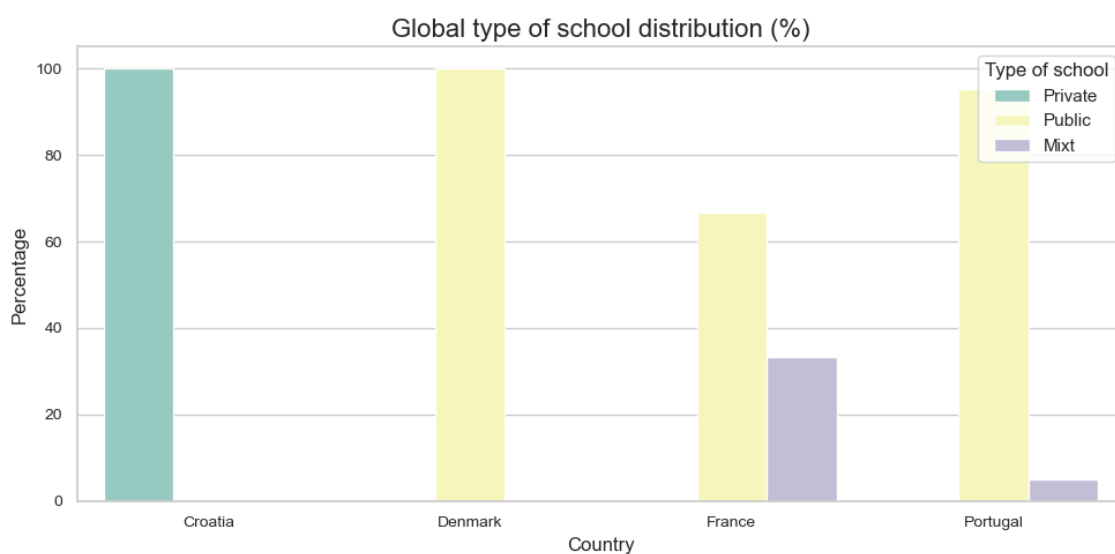
## Global Teachers' Gender Distribution



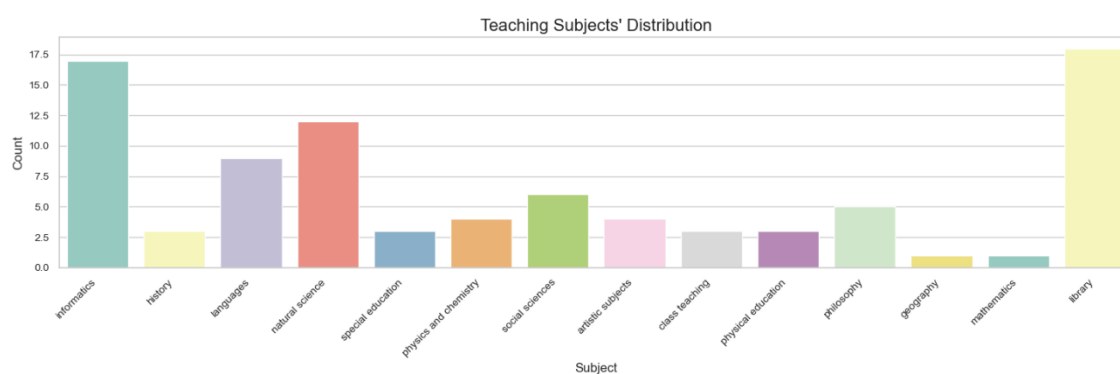
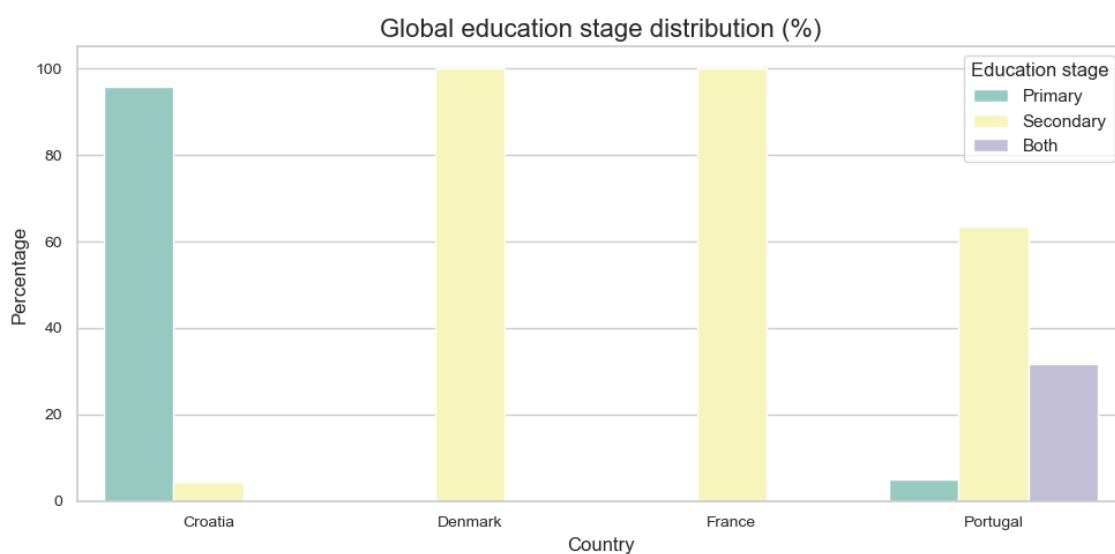
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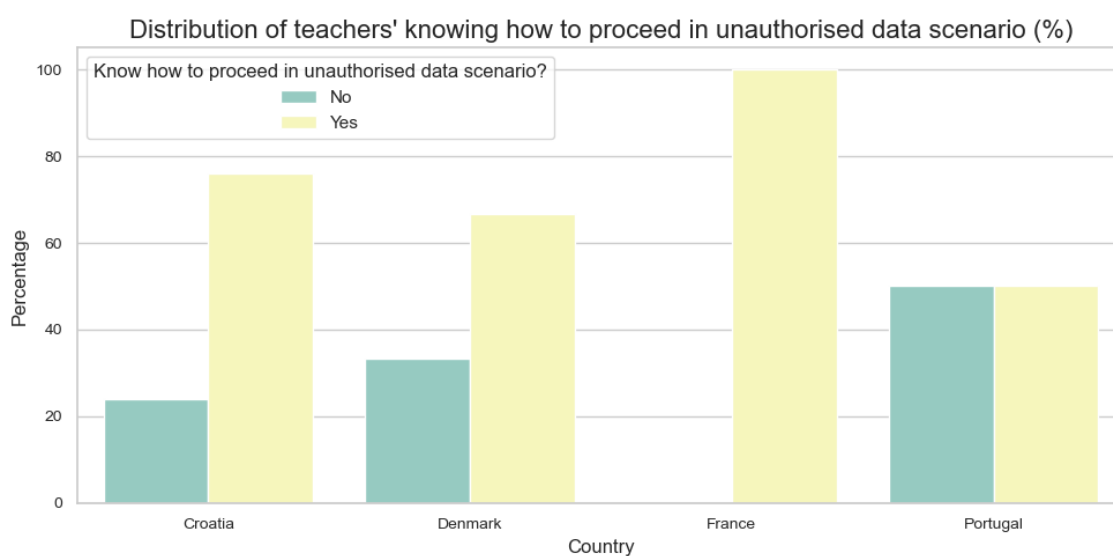
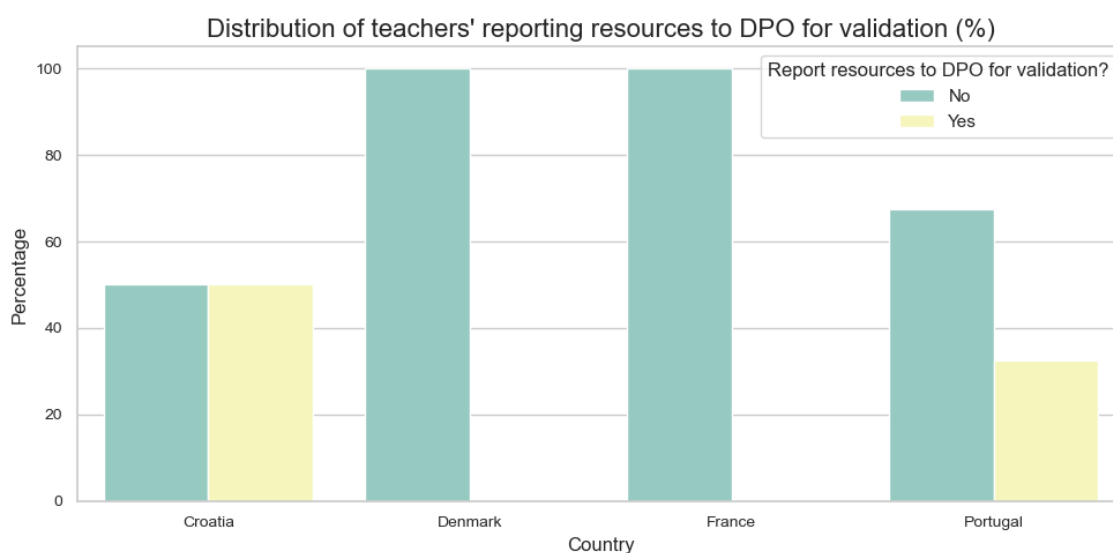
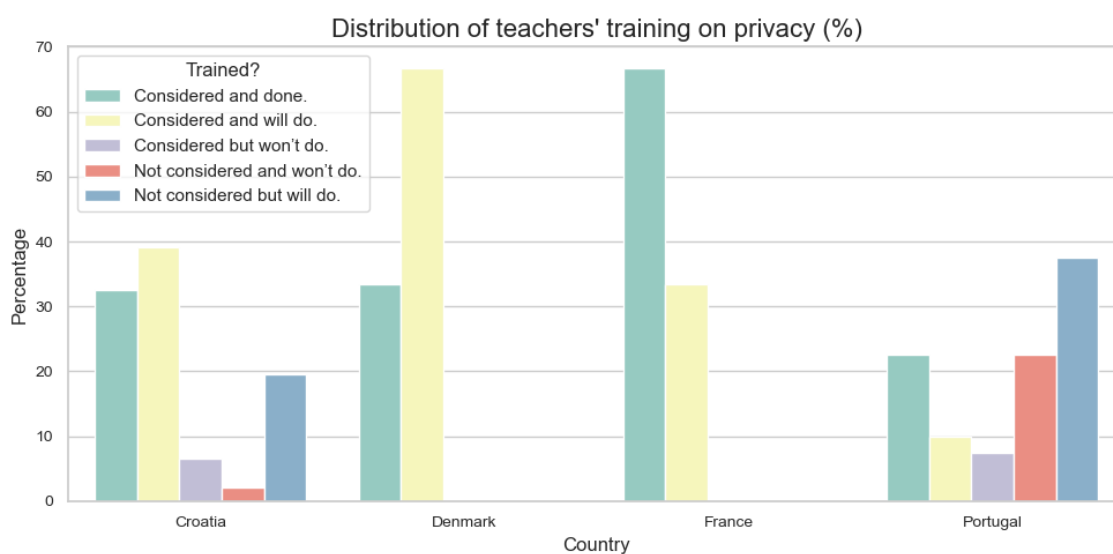
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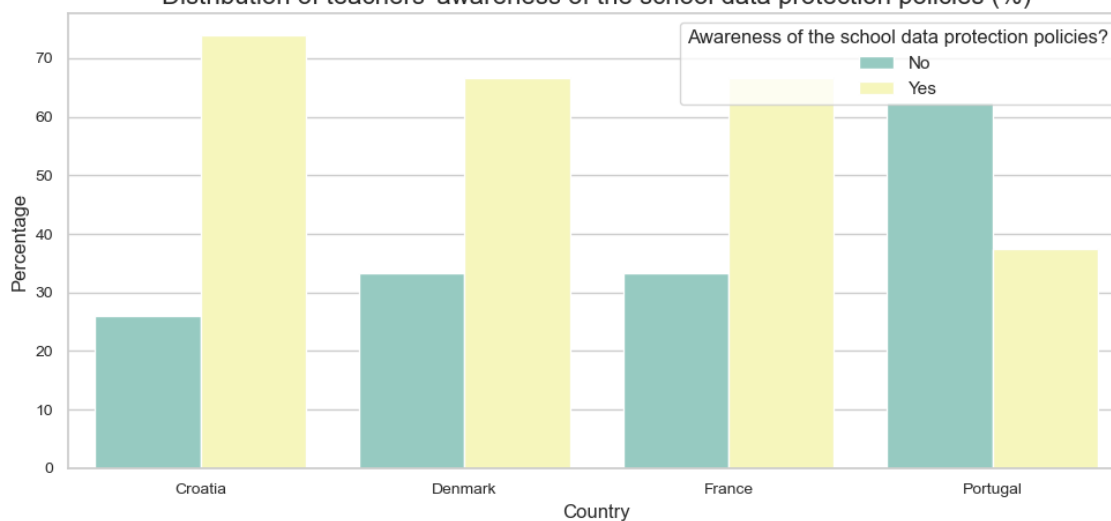




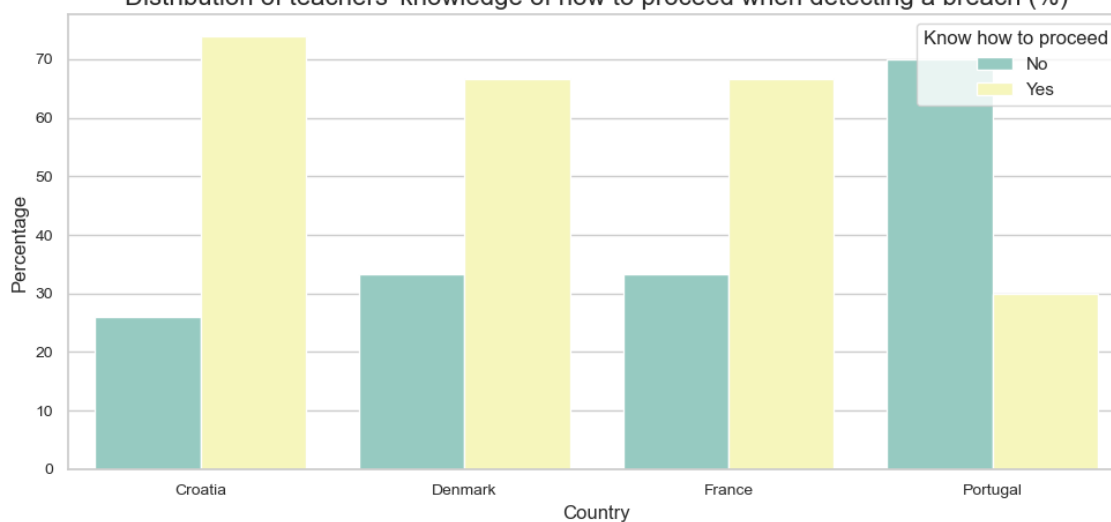




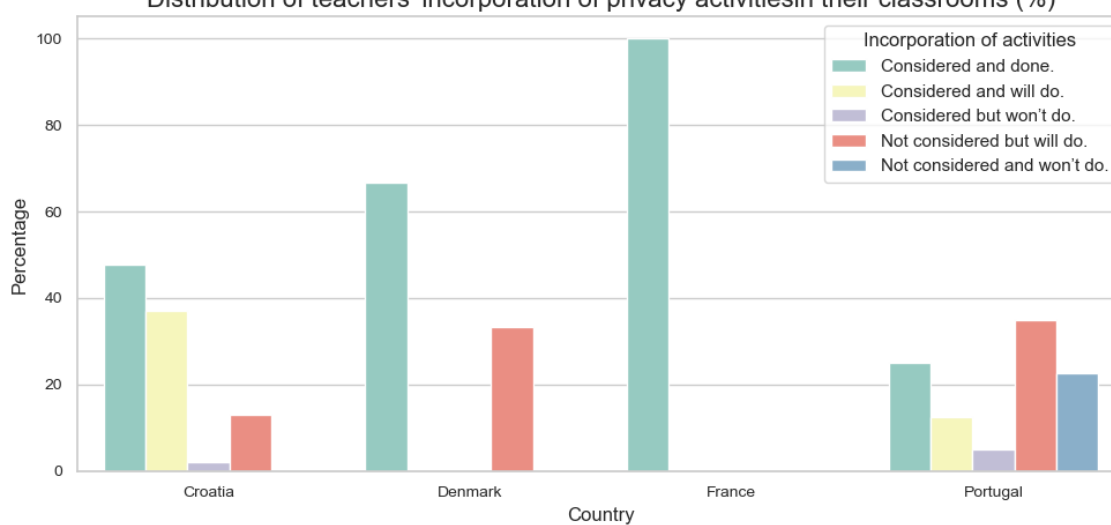
Distribution of teachers' awareness of the school data protection policies (%)

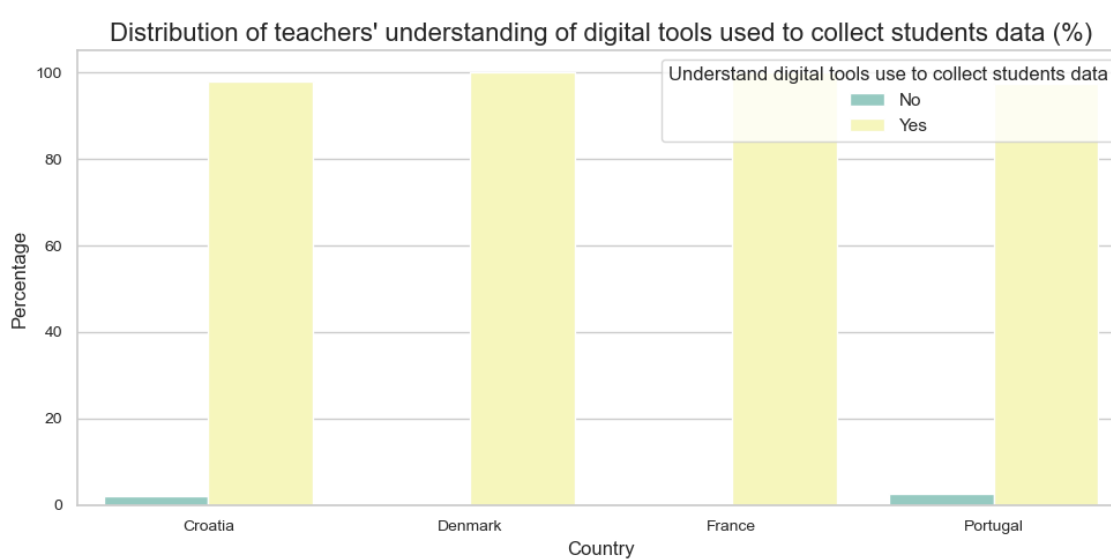
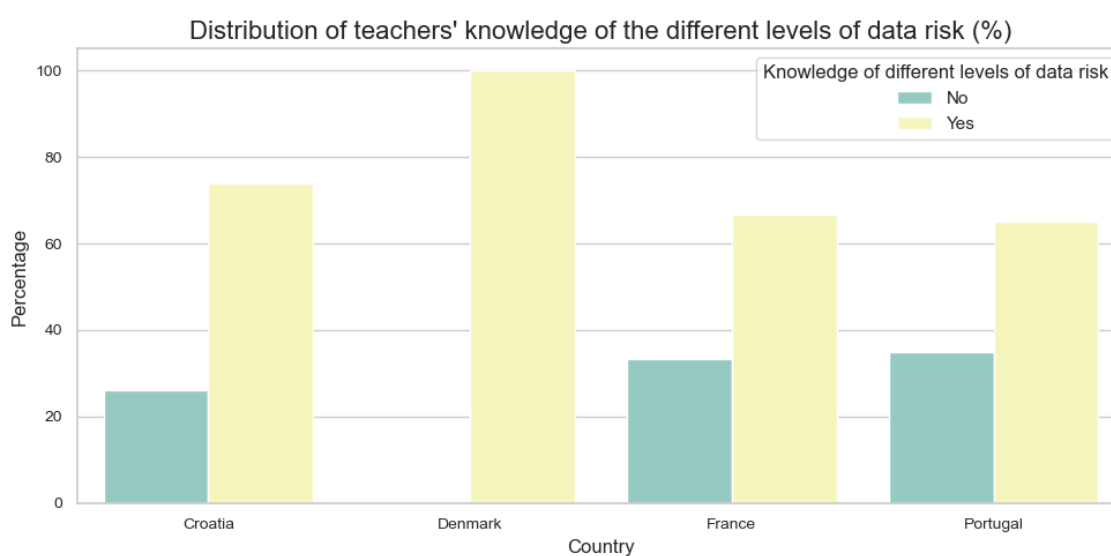
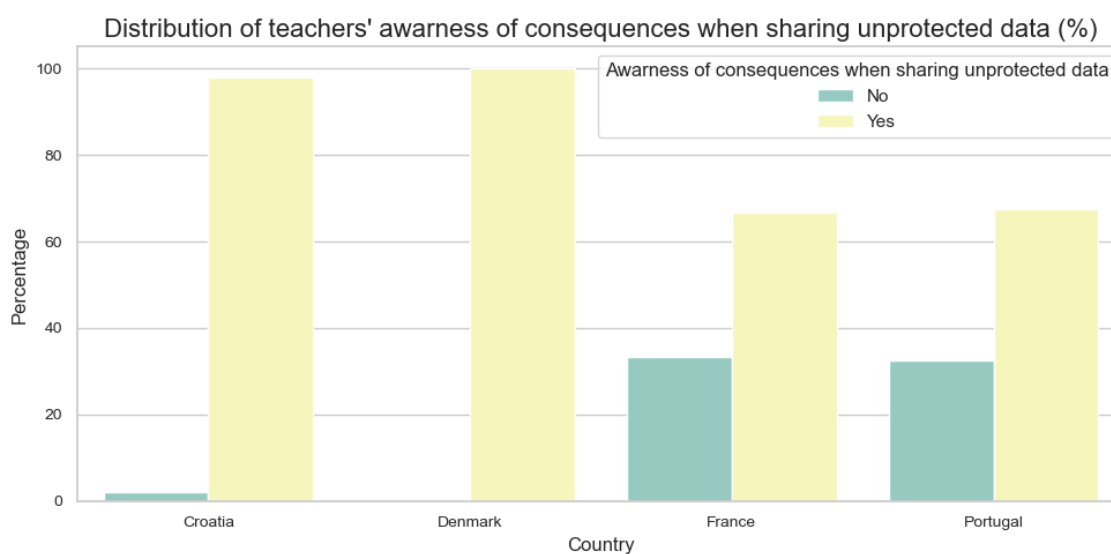


Distribution of teachers' knowledge of how to proceed when detecting a breach (%)

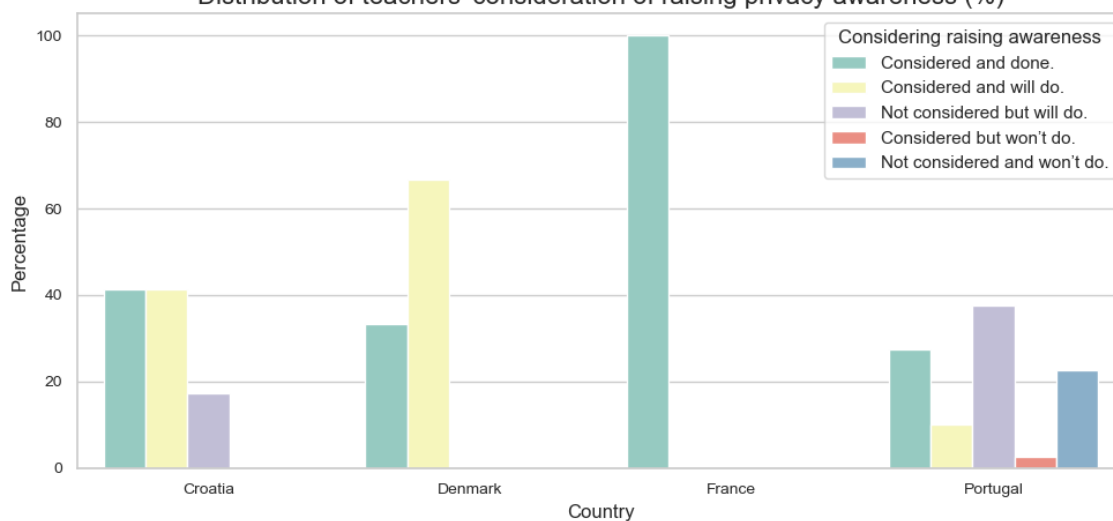


Distribution of teachers' incorporation of privacy activities in their classrooms (%)

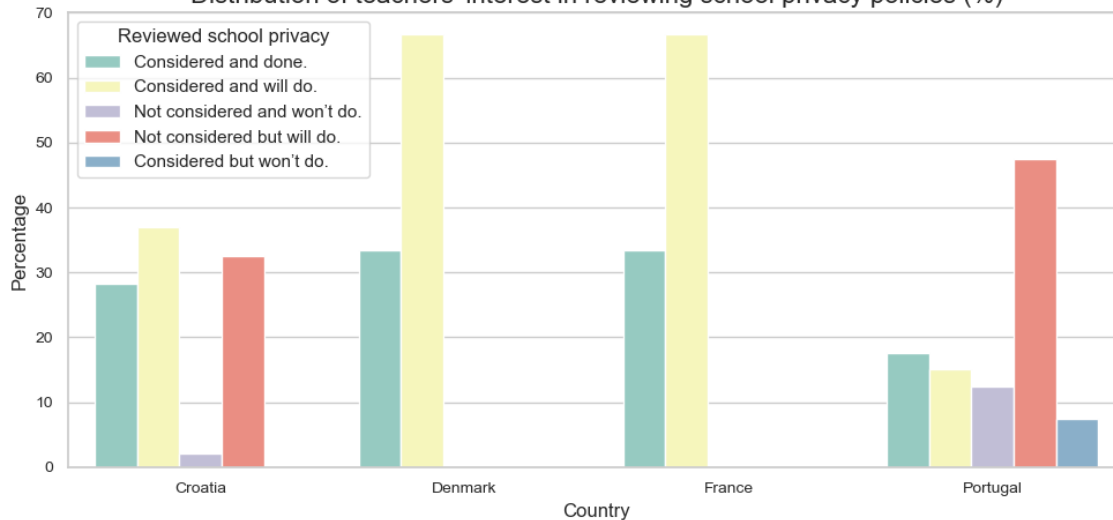




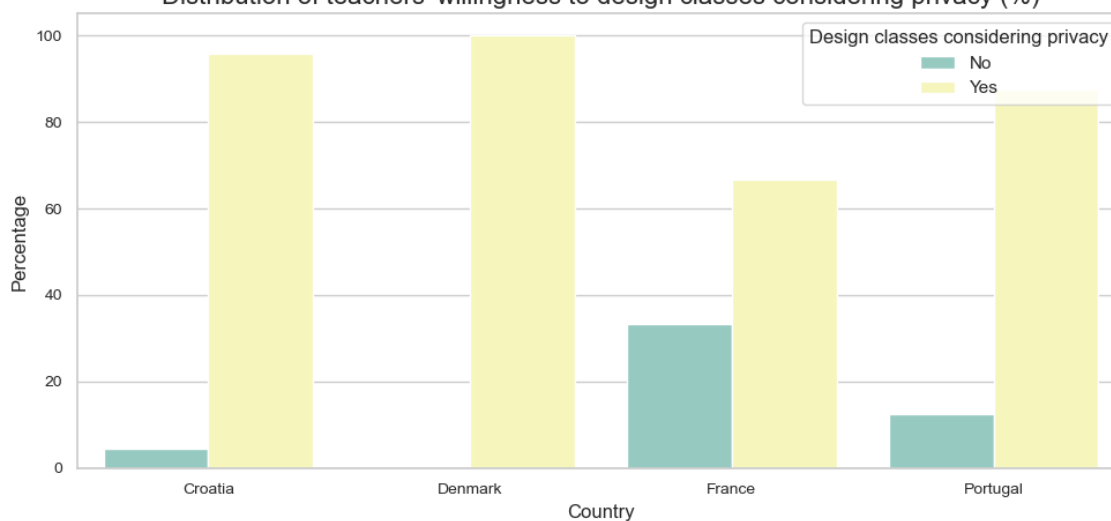
Distribution of teachers' consideration of raising privacy awareness (%)



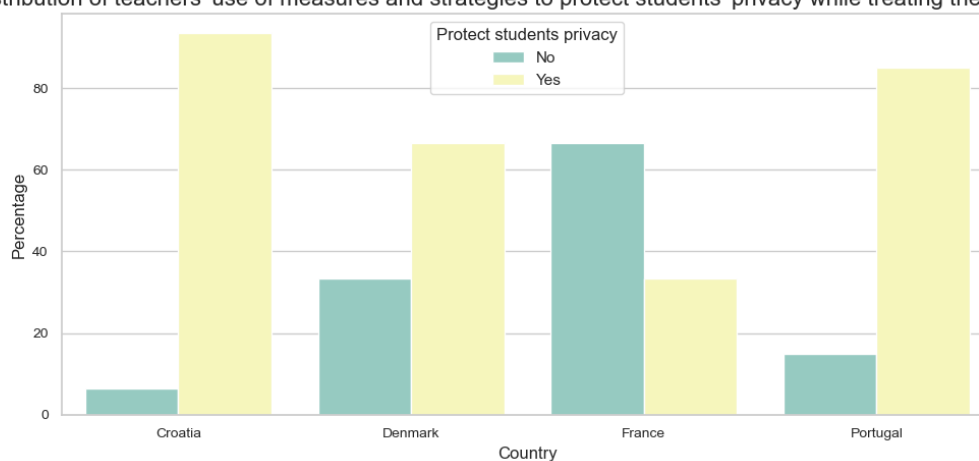
Distribution of teachers' interest in reviewing school privacy policies (%)



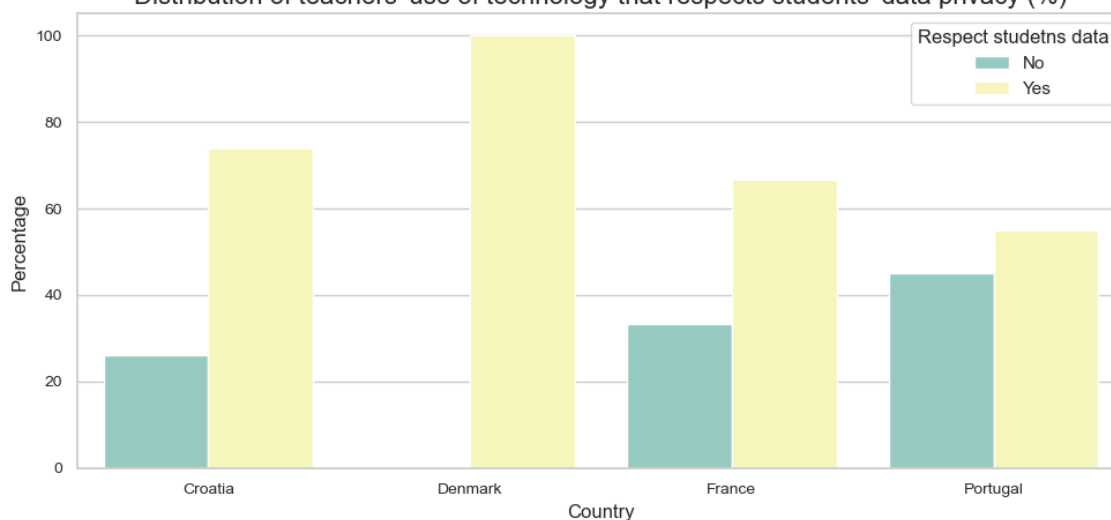
Distribution of teachers' willingness to design classes considering privacy (%)

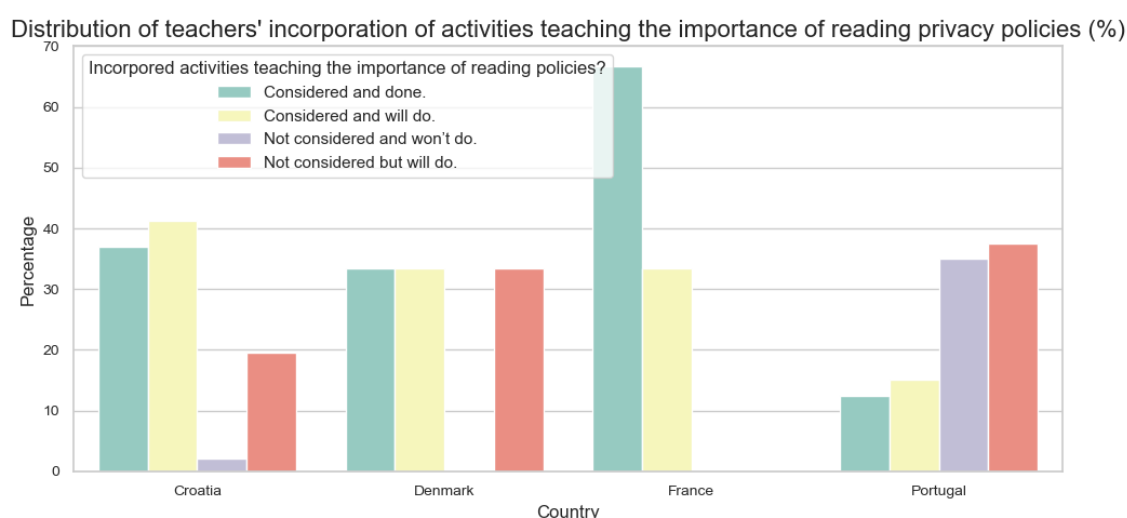
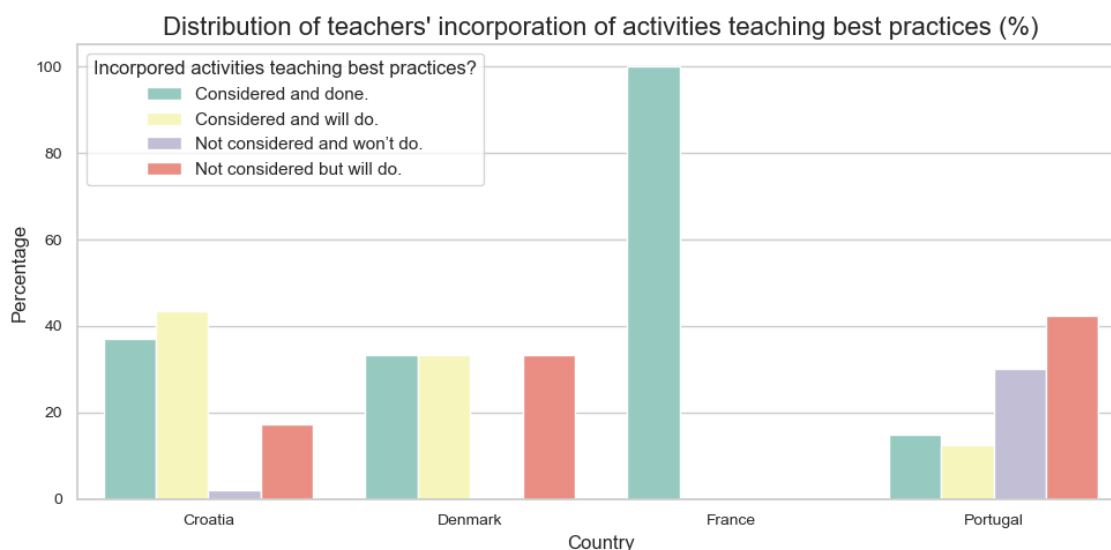


Distribution of teachers' use of measures and strategies to protect students' privacy while treating their data (%)



Distribution of teachers' use of technology that respects students' data privacy (%)





#### **Question 24: 'Describe any concern regarding data privacy and security in data academic treatment in your school.'**

Only 25 teachers out 94 replied to that question, and 6 of them indicate that they do not have any concern. So only 20,21% of the survey respondents have a concern regarding data privacy and security in data academic treatment in their school.

The survey responses regarding the concerns can be summarized into several key points.

Firstly, some teachers expressed concerns about the use of social media platforms such as TikTok for sharing information with forthcoming students. This raised worries about the potential risks associated with these platforms and the need for careful handling of data in such contexts.

Secondly, there was a notable observation that public schools often lack structured data protection policies and designated personnel responsible for data protection. This highlighted a need for more serious and effective measures to ensure data security within educational institutions.

Another important theme that emerged from the responses was the emphasis on involving all teachers in decision-making processes regarding data protection. Teachers stressed the importance of expert guidance and establishing appropriate protection mechanisms to safeguard sensitive information effectively.

Several teachers voiced concerns about potential data misuse, the use of personal information for illicit purposes, and the risks associated with information escape. These concerns underscored the importance of maintaining strict control and accountability over data handling and access.

Furthermore, there was a general fear among some teachers that data could be abused, potentially harming both the school and themselves. The awareness of personal information exposure, both for lecturers and students, was also highlighted as an area of concern. Some teachers mentioned a need for better knowledge and sources to address these issues effectively.

There was also uncertainty among teachers regarding the effectiveness of data protection tools and the visibility of personal activities on the internet. They expressed worries about the safety of personal data stored on classroom computers and personal devices.

Concerns were raised about the use of platforms with evaluation instruments and how these platforms handle and utilize the collected data. Teachers desired clarity on the guidelines and procedures in place to ensure responsible data management in such contexts.

Overall, there was an expectation that schools should take responsibility for protecting employees and students regarding data privacy and security. However, some teachers expressed a need for clearer guidelines and better communication to address these concerns adequately.



## 3 Answers analysis

### **Are teachers trained in digital skills or competencies?**

Looking at the global perspective, it is evident that a significant number of teachers have taken action in this regard, with 27 of them indicating that they have considered and already implemented the necessary training. Another 25 teachers have acknowledged the importance and plan to undergo training in the near future. On the other hand, a smaller group of 10 teachers have shown no interest in pursuing such training, while 6 teachers have expressed their consideration but ultimately decided against it.

Digging deeper into the breakdown by country, Croatia stands out with a considerable portion of teachers actively engaged in training efforts. Out of the total respondents from Croatia, 15 teachers have already completed the training, 18 are planning to undertake it, and 9 have recognized the need for training but have not taken action yet. A single teacher has expressed disinterest, highlighting the minority holding this perspective in Croatia.

Denmark and France also demonstrate positive engagement, albeit on a smaller scale. In Denmark, one teacher has completed the training, while two more are committed to doing so. Similarly, in France, two teachers have completed the training, while one remains in the planning phase.

Finally, Portugal exhibits a diverse range of perspectives. While 9 teachers have undergone training and 4 are in the planning stage, a notable number of teachers (9) have chosen not to pursue training despite recognizing its significance. Additionally, 15 teachers express intentions to undertake training but have not yet initiated the process.

These findings shed light on the varied levels of commitment to digital skills training among teachers across different countries. They emphasize the importance of continued efforts to provide comprehensive training opportunities and address potential barriers that hinder some teachers from actively engaging in enhancing their digital competencies.

### **Does teachers contact the Data Privacy Officer to solve any doubt, check any data privacy related action, and report any data breach?**

When it comes to reporting resources to the DPO for validation, the data shows that in Croatia, an equal number of teachers both report and do not report resources, with each category representing 50% of the total count. In Denmark and France, all teachers do

not report resources to the DPO. However, in Portugal, the majority (67.5%) of teachers do not report, while the remaining 32.5% do report.

Regarding the teachers' knowledge of how to proceed in an unauthorized data scenario, the results vary by country. In Croatia, the majority (76.1%) of teachers have knowledge of the appropriate steps to take, while the remaining 23.9% do not. In Denmark, 66.7% of teachers know how to proceed, while 33.3% do not. In France, all teachers surveyed have knowledge of the necessary steps. In Portugal, the knowledge is evenly distributed, with 50% of teachers knowing how to proceed and the other 50% lacking that knowledge.

When it comes to detecting a breach, the results also differ by country. In Croatia, 73.9% of teachers know how to proceed, while 26.1% do not. In Denmark, 66.7% of teachers know the necessary steps, and the remaining 33.3% do not. In France, one-third of teachers do not know how to proceed, while the remaining two-thirds have the required knowledge. In Portugal, 70% of teachers do not know how to proceed, while 30% have the necessary knowledge.

To summarize the global findings, the results show that contacting the DPO for resource validation is evenly split in Croatia, with equal numbers reporting and not reporting. In Denmark and France, none of the teachers report resources to the DPO. In Portugal, most teachers do not report. Regarding knowledge of unauthorized data scenarios, Croatia and Portugal show an even distribution, with approximately half of the teachers having the required knowledge. In Denmark, a higher percentage of teachers know how to proceed. In terms of breach detection, Croatia and Denmark have a higher proportion of teachers with the necessary knowledge, while Portugal shows a larger percentage of teachers lacking that knowledge. France has a 100% knowledge rate for both unauthorized data scenarios and breach detection. These findings provide insights into the extent to which teachers engage with the DPO and possess the required knowledge in matters of data privacy and breach reporting.

### **Are teachers informed about the school's privacy policies?**

In terms of awareness of the school's data protection policies, the results vary by country. In Croatia, the majority (73.9%) of teachers are aware of the policies, while 26.1% are not. In Denmark and France, one-third of teachers are aware of the policies, while the remaining two-thirds are not. In Portugal, 37.5% of teachers are aware of the policies, while the majority (62.5%) are not.

Regarding teachers' interest in reviewing the school privacy policies and agreements, the results also differ by country. In Croatia, a significant proportion of teachers have

considered and either already reviewed the policies (28.3%) or plan to do so (36.9%). A small percentage have not considered reviewing the policies (2.2%) or have no intention to do so (32.6%). In Denmark and France, one-third of teachers have considered and reviewed the policies, while the remaining two-thirds plan to do so. In Portugal, a lower percentage of teachers have considered and reviewed the policies (17.5%), and a similar percentage plan to do so (15%). Some teachers in Portugal have considered but do not plan to review the policies (7.5%), while others have not considered reviewing them (12.5%). Additionally, a significant proportion of teachers in Portugal have not considered reviewing the policies but are willing to do so (47.5%).

In summary, the results indicate that the level of awareness among teachers regarding the school's data protection policies varies by country. While Croatia has a higher percentage of teachers who are aware of the policies, Denmark, France, and Portugal have a lower level of awareness. Similarly, the interest in reviewing the school's privacy policies and agreements varies across countries, with Croatia showing a higher level of consideration and action. Denmark and France have a similar pattern of interest, with one-third of teachers having considered and reviewed the policies. Portugal exhibits a more mixed response, with varying levels of consideration and action.

These findings highlight the need for continued efforts to ensure that teachers are well-informed about the school's privacy policies and to encourage their active engagement in reviewing and understanding these policies.

### **Do teachers design activities that protect students' data and privacy?**

In terms of incorporating privacy activities, the responses vary by country. In Croatia, a significant portion of teachers have considered and implemented such activities (47.8%), while a considerable number have either considered but won't implement them (2.2%) or have not considered them yet but plan to do so (13%). In Denmark, the majority of teachers have incorporated privacy activities (66.7%), and one teacher plans to do so in the future (33.3%). In France, all participating teachers have incorporated privacy activities (100%). In Portugal, 25% of teachers have incorporated privacy activities, 12.5% plan to do so, and a portion either considered but won't implement them (5%) or have not considered them yet but plan to do so (35%).

Regarding teachers' consideration of raising privacy awareness, the results also vary by country. In Croatia, a substantial number of teachers have already considered and taken action to raise awareness (41.3%), and an equal number plan to do so (41.3%). In Denmark, one-third of teachers have considered and taken action, while one teacher plans to do so (33.3%). In France, all participating teachers have considered and taken action to raise awareness (100%). In Portugal, 27.5% of teachers have considered and

taken action, 10% plan to do so, and a portion either considered but won't implement them (2.5%) or have not considered them yet but plan to do so (22.5%).

When it comes to designing classes considering privacy, the majority of teachers across all countries prioritize privacy (ranging from 87.5% to 100%), except for France, where one-third of teachers do not consider privacy in their class design (33.3%).

Incorporating activities teaching best practices varies among countries. In Croatia, a considerable number of teachers have either considered and implemented such activities (36.9%) or plan to do so (43.5%). In Denmark, one-third of teachers have considered and implemented these activities, while one teacher plans to do so (33.3%). In France, all participating teachers have considered and implemented activities teaching best practices (100%). In Portugal, 15% of teachers have considered and implemented these activities, 12.5% plan to do so, and a portion either considered but won't implement them (30%) or have not considered them yet but plan to do so (42.5%).

Lastly, the incorporation of activities teaching the importance of reading privacy policies follows a similar pattern. In Croatia, a significant number of teachers have either considered and implemented such activities (36.9%) or plan to do so (41.3%). In Denmark, one-third of teachers have considered and implemented these activities, while one teacher plans to do so (33.3%). In France, two-thirds of teachers have considered and implemented these activities, while one-third plans to do so (66.7%). In Portugal, 12.5% of teachers have considered and implemented these activities, 15% plan to do so, and a portion either considered but won't implement them (35%) or have not considered them yet but plan to do so (37.5%).

Overall, the results indicate that teachers have varying levels of involvement in designing activities that protect students' data and privacy. While some countries demonstrate a higher level of incorporation and consideration of privacy activities, others show room for improvement. Encouraging teachers to prioritize privacy and providing them with the necessary resources and support can further enhance their efforts to protect students' data and privacy.

### **Are teachers aware of data privacy problems?**

Regarding the awareness of consequences when sharing unprotected data, the majority of teachers across all countries have a high level of awareness. In Croatia, 97.8% of teachers are aware of the consequences, with only a small percentage (2.2%) lacking awareness. In Denmark, all participating teachers (100%) are aware of the consequences. In France, two-thirds of teachers (66.7%) are aware, while the remaining

one-third (33.3%) lack awareness. In Portugal, 67.5% of teachers are aware of the consequences, while 32.5% lack awareness.

In terms of knowledge about different levels of data risk, the majority of teachers are knowledgeable, although there are some variations. In Croatia, 73.9% of teachers have knowledge of different levels of data risk, while 26.1% do not. In Denmark, all participating teachers (100%) possess this knowledge. In France, two-thirds of teachers (66.7%) are knowledgeable, while one-third (33.3%) is not. In Portugal, 65% of teachers have knowledge of different levels of data risk, while 35% do not.

Regarding the understanding of digital tools used to collect students' data, the results indicate a high level of understanding among teachers. In Croatia, 97.8% of teachers understand the use of digital tools for data collection, with only a small percentage (2.2%) lacking understanding. In Denmark and France, all participating teachers (100%) understand the use of digital tools. In Portugal, 97.5% of teachers understand, while a small percentage (2.5%) lack understanding.

Overall, the results suggest that a significant majority of teachers are aware of data privacy problems and the consequences associated with sharing unprotected data. They also demonstrate a reasonable level of knowledge about different levels of data risk and an understanding of digital tools used for data collection. These findings indicate a positive trend in teachers' awareness and understanding of data privacy, which is crucial for safeguarding students' personal information. However, there is still room for improvement, particularly in certain areas and countries where a small percentage of teachers lack awareness or knowledge. Continuous education and training programs can help ensure that teachers stay updated on data privacy issues and can effectively protect their students' privacy.

### **Do teachers use technology that ensure students' data privacy?**

In terms of measures and strategies to protect students' privacy while treating their data, most teachers across all countries utilize such measures. In Croatia, 93.5% of teachers employ these measures, while a small percentage (6.5%) do not. In Denmark, 66.7% of teachers use these measures, and in France, 33.3% of teachers do not, while the remaining 66.7% employ them. In Portugal, 85% of teachers utilize measures to protect students' privacy, while 15% do not.

Regarding the use of technology that respects students' data privacy, the results show a varying level of adoption. In Croatia, 73.9% of teachers use technology that respects students' data privacy, while 26.1% do not. In Denmark, all participating teachers (100%) use such technology. In France, two-thirds of teachers (66.7%) use this technology, while

one-third (33.3%) do not. In Portugal, 55% of teachers utilize technology that respects students' data privacy, while 45% do not.

These results indicate a positive trend in the use of measures and strategies to protect students' privacy while treating their data. Most teachers in most countries are proactive in employing such measures. However, there is still room for improvement, especially in countries where a small percentage of teachers do not utilize these measures.

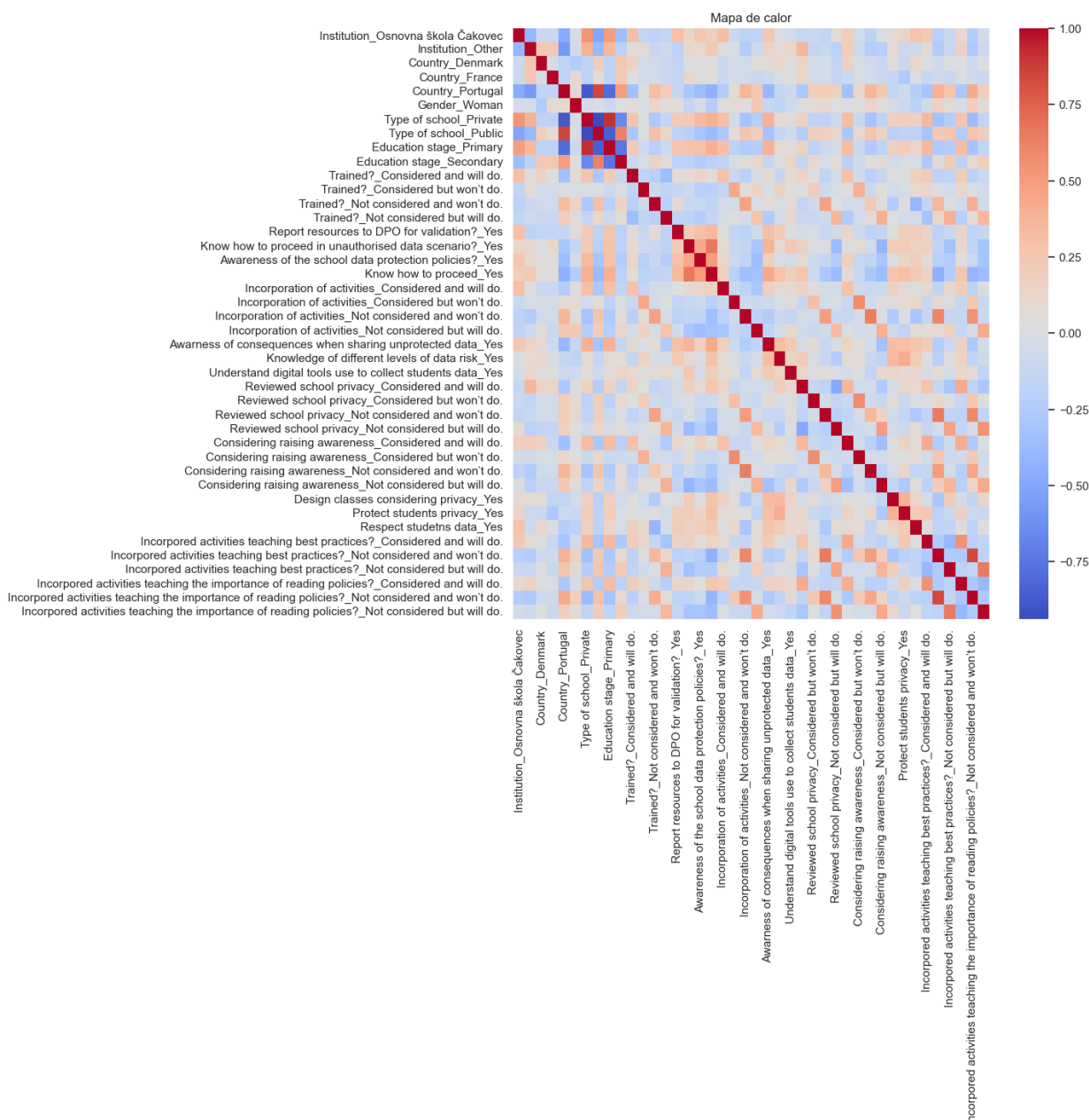
The adoption of technology that respects students' data privacy is relatively high, although there are variations among countries. It is encouraging to see that a significant percentage of teachers are using technology designed to protect students' data privacy. However, efforts should be made to increase adoption in countries where the usage rate is lower.

Overall, the results suggest a growing awareness among teachers about the importance of protecting students' data privacy and the use of appropriate measures and technology. Continued education, training, and the availability of privacy-focused tools and resources can further enhance teachers' ability to ensure students' data privacy while using technology effectively in the classroom.

## Correlation of teachers' survey answers

Survey answers have been broken down to create dichotomic variables. Those variables' correlations have been checked.

The strongest not related correlations observed are hereafter explained.



The fact of having never considered, nor in the future, doing any training about privacy policies as a teacher, has a strong correlation with not introducing privacy activities in classrooms. In other words, those teachers not introducing privacy activities are usually not interested on receiving any training about this subject themselves.



This reluctance to privacy training has also a strong relationship with a low interest on reviewing the school privacy agreements and policies.

In the other hand, knowing how to proceed in an unauthorized data scenario is highly related with been periodically informed and update about the school data protection policies and procedures. Moreover, not been updated about the school policies has also a high correlation to the lack of privacy activities in the teachers' lessons.

To put it in a nutshell, it can be stated that the more conscious about privacy a teacher is, the more it tries to raise awareness about it in his/her classroom. And the less policy updated teachers are the ones willing less training about it.

