

**OFFICIAL-SENSITIVE: ADVICE TO MINISTERS**

From: Alan Armstrong  
Education Scotland  
18 December 2018

**Deputy First Minister and Cabinet Secretary for Education and Skills**

**YAMMER REVIEW - REPORT FOR PUBLICATION AND GOVERNMENT INITIATED QUESTION FOR CLEARANCE**

**Purpose**

1. To provide the Deputy First Minister with:
  - the Yammer Review Report and Executive Summary for your approval to publish; and
  - a Government Initiated Question (GIQ) for clearance.

**Priority**

2. Routine. A response by 7 January 2019 will allow us to prepare to publish.

**Background**

3. A submission entitled Yammer Review and Next Steps was submitted on 10 September 2018 which detailed the findings of the Yammer Review and outlined the key recommendations to be taken forward. DFM invited representatives from Education Scotland to meet with him on 1 November 2018 to discuss the Yammer Review. DFM accepted the recommendations in that submission.

4. At the meeting, DFM requested that Education Scotland finalise the Yammer Review Report for publication, together with an Executive Summary. DFM also requested that a GIQ was prepared to be asked on the day the Report and Executive Summary are published.

**Yammer Review Report and Executive Summary**

5. The Yammer Review Report and Executive Summary will be published on Glow Connect on Thursday 10 January 2019. The Yammer Review Report and Executive Summary have been attached separately.

**Government Initiated Question (GIQ)**

6. The completion of the Yammer review and the publication of the Yammer Review Report and the Executive Summary will be announced using a GIQ.

7. The suggested timing of the question is Thursday 10 January 2019 to align with the publication of the Yammer Review Report and Executive Summary on Glow Connect. No press release is planned.

8. The following GIQ is provided for clearance:

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### **Q. What was the outcome of Education Scotland's review of the Yammer service within Glow?**

**A.** The review was carried out during summer 2018 and the full review document has been/will be published [today] on the Glow Connect website.

The review concluded that whilst there are clear and demonstrable educational benefits for learner use of Yammer, there are significant challenges with regard to control, moderation and safeguarding. In addition, the new services of Microsoft Teams and Google Classroom have now been incorporated within Glow and provide similar functionality in a more controlled environment.

Yammer is being well used by staff for collaboration on a range of topics; is facilitating professional dialogue; and supports development of and interaction with Professional Learning Communities.

In conclusion, I have decided that Yammer access will not be reinstated for learners but will remain available to staff and that Microsoft Teams and Google Classroom will be promoted as suitable alternatives for pupil collaboration.

9. Education Scotland request DFM to nominate an MSP colleague to ask the question.

### **Handling**

10. We do not intend to issue a press release however reactive lines have been prepared - see Annex 1.

11. Previously prepared lines that were developed as a result of the earlier Yammer incidents have also been included - see Annex 2.

### **Recommendation**

12. **The Deputy First Minister is asked to:**

- **approve the Yammer Review Report and Executive Summary for publication on Thursday 10 January 2019; and**
- **clear the GIQ and provide any feedback on suggested timing.**

**Alan Armstrong**  
**Strategic Director**  
Education Scotland  
Ext[redacted - s.38  
(1)(b)]

18 December 2018

## OFFICIAL-SENSITIVE: ADVICE TO MINISTERS

### Annex 1 - Reactive Lines for Yammer Review Report Publication

#### POTENTIAL SENSITIVITIES

**Q: Why did it take so long to take action?**

A: Action was carried out in the appropriate timeframe with the review being thorough and comprehensive to ensure that all aspects of the service were looked into - where there were issues and where there were successes - as well as stakeholder engagement to ensure a comprehensive plan for future use and success of the service.

**Q: Was a review planned or as a result of the incidents?**

A: A review was already scheduled to start during the summer break 2018, but the decision was made to bring this forward due to a couple of incidents which showed a small number of parents had concerns around usage of the service.

This allowed for parents to see Education Scotland was responding to their concerns in a timely fashion.

**Q: So was Education Scotland wrong about releasing Yammer in the first place?**

A: As with all platforms and channels used by Education Scotland, including staff, children and stakeholders, there was a full review of Yammer undertaken prior to its release. This focused on the collaborative merits of the service as well as the potential risks.

Since Yammer was released Microsoft has released a new product called Teams and Google has released Classroom and both services offer similar functionality in a more controlled environment which is more suited to education. Schools and education authorities have been made aware of these and what expectations there are around monitoring such offerings.

**Q: Can all Glow Yammer users see the posts in the All company feed?**

A: All posts made in the All company feed could be viewed by other Yammer users, the very nature of the feed resulted in a larger teacher presence for monitoring of content. The Yammer Use policy provides guidance for all users on acceptable and inappropriate behaviours. Microsoft Teams and Google Classroom provide similar functionality to Yammer in a more controlled manner without the All company functionality

All posts made in the All company feed could be viewed by other Yammer users, as you would expect in a social network. However, the very nature of the feed resulted in a larger teacher presence for monitoring of content due to the number of teachers and support staff on the service.

Additionally, the Yammer Use policy provides guidance for all users on acceptable and inappropriate behaviours. Microsoft Teams and Google Classroom provide similar functionality to Yammer in a more controlled manner without the All company functionality.

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### **Q: No open groups in Teams, not searchable - compromised functionality?**

A: This provides more control within the environment and additional group members can be added by email address which retains the collaborative nature of the product.

### **Q: What makes Teams safer if there is no keyword monitoring?**

A: Teams can only be created with a teacher present resulting in additional monitoring in a more controlled environment: it also has a mute functionality that removes learners ability to post.

### **Q: Why were posts not removed historically?**

A: Historically, when a user was removed from Yammer their previous posts were not necessarily removed due to procedural and system constraints. Subsequently, the procedures were updated.

### **Q: Why do we not already make use of 3<sup>rd</sup> party products for safeguarding? Why did it take serious incidents to make you take this seriously?**

A: After extensive consultation with stakeholders, the proposed controls for the Yammer environment were deemed to be adequate. As part of our ongoing assessment of the Glow environment and increased usage of the Yammer service a decision was made to schedule a full review of existing controls, processes and to investigate the current market for additional safeguarding tooling to enhance our current offering.

Due to the nature of our environment the majority of offerings will not function as required within Glow. Education Scotland have been in discussion with organisations with a view to partnering and creating a bespoke safeguarding tool for the Glow environment. The Invitation to Tender for this work will be formally released early in the new year.

### **Q: Is Yammer data stored in the US?**

Due to Microsoft's operating model limited personal information from Yammer is stored in the US; this has been deemed to have the appropriate security controls in place and is bound by EU model clauses.

### **Q: What are the timescales for acting on reported concerns?**

A: Reactive moderation of posts is carried out by Education Scotland in response to automated emails raised by keyword monitoring triggers and Report A Group Concern (RAGC) submissions related to Yammer. Both of these are responded to during business hours through a monitored mailbox and text alerts. RAGC submissions also trigger text notifications and are monitored during office hours at weekends by a nominated on-call staff member. Upon receipt of a concern the local authority key contact is notified immediately to take appropriate action.

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### Annex 2 - Lines from Previous Yammer Incidents

- Glow is an online learning resource which allows teachers and pupils to collaborate and learn in a closed forum which can only be accessed by individual username and password.
- Education Scotland funds and provides the Glow platform to local authorities or education establishments. We also provide core services such as Office 365, Glow Blogs and Google G Suite. Yammer is part of Office 365, and the decision to use Yammer, and the moderation of the content subsequently produced, is for the local authority using Glow. The decision to give pupils access to the system rests with the relevant education establishment and local authority, and it would be for them to decide on seeking parental consent.
- Education Scotland provides reactive moderation of all Glow services, including Yammer site via the 'report a concern' button. In addition to lists of inappropriate word, which are constantly being updated, we are also exploring further options and tools which will enhance the moderation facilities for Yammer.
- After these concerns were raised, Education Scotland removed the images we were alerted to. All Glow services, including Yammer, are subject to ongoing review and access to the Yammer service has been temporarily suspended whilst we conduct such a review. We will continue to work with local authorities to ensure that Glow continues to add value to learners and teachers.
- Education Scotland provides reactive moderation of all Glow services, including Yammer, via the 'report a concern' button. This flags content for review by Education Scotland staff on a case-by-case basis. It is important to note that the content reported may not ultimately be inappropriate. We also monitor Glow for inappropriate words, the list of which is constantly being updated, and we are exploring further options and tools which will enhance and strengthen moderation facilities as part of the ongoing review of Yammer. We are working closely with local authorities to ensure these issues are addressed and the service will not be reactivated for pupils until the Deputy First Minister is fully satisfied that they have been resolved.
- Teachers and lead officers can also report concerns directly to local authorities, and it would be for the relevant education department to decide on what action to take on these matters.
- Access to Glow is offered to every local authority in Scotland, and almost all local authorities use Glow in some form. However, it's for individual local authorities to decide if they use the Yammer function. While Glow is available to primary school children, less than 4 per cent of primary age users have accessed Yammer. The decision to give pupils access to the system via individual password and username, rests with the relevant education establishment and local authority, and it would be for them to decide on seeking parental consent.

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Copy List:	For Action	For Comments	For Information		
			Portfolio Interest	Constit Interest	General Awareness
First Minister					X
Minister for Further, Higher Education and Science					X
Minister for Children and Young People					X
Minister for Business, Fair Work and Skills					X
Minister for Parliamentary Business					X
Parliamentary Clerk					

Permanent Secretary  
 DG Education, Communities and Justice  
 Fiona Robertson  
 Director for Children and Families  
 Director of Advanced Learning and Science  
 Director for Early Learning and Childcare  
 Clare Hicks  
 Andrew Bruce  
 Mick Wilson  
 [redacted - s.38 (1)(b)]  
 Gayle Gorman  
 [redacted - s.38 (1)(b)]  
 Communications DFM & Education  
 EdS Communications  
 PS/Education Scotland

## **Yammer Review - Executive Summary**

### **Glow and Yammer**

Glow is Scotland's national online learning platform. It is funded by the Scottish Government and managed by Education Scotland. Glow is a closed network that provides access to a range of tools and services which can only be accessed by learners, teachers and others directly involved in education in Scotland. The service is used widely in schools across Scotland with 220,000 users logging in over three million times during March 2018.

The core services within Glow are currently Microsoft Office 365; Google G Suite for Education; Glow Blogs (powered by WordPress) and Glow Meet (powered by Microsoft Skype).

The most popular aspect of Glow is Microsoft Office 365. It is made up of a number of online applications including Word, Excel, PowerPoint and Outlook, as well as Yammer, Microsoft's social networking service. Yammer was made available in Glow in 2016, and, at the time, was the only tool of this type available within Glow. More information about Glow in general and the Office 365 suite in Glow can be found here - <https://glowconnect.org.uk/help-with-glow/microsoft-office-365/>

### **The Review**

Glow is constantly under review to ensure it continues to meet the needs of learners and teachers in classrooms across Scotland both in terms of functionality and safety.

As part of this process, Yammer was scheduled for a review during the school summer break in 2018. However, after two incidents where inappropriate behaviour and content was detected, the Yammer review was brought forward to the start of June. Yammer has been unavailable to learners from that point, although access was reinstated for staff users to allow them to continue their collaborative work using the service.

The review was undertaken by the Glow Programme team at Education Scotland during June, July and August 2018, and looked at a number of aspects of the Yammer service. These included:

- user numbers;
- educational benefits;
- moderation and safeguarding (both at a local and national level);
- Yammer alternatives within Glow.

### **Findings**

There are almost 70,000 registered users of the Yammer service within Glow. That number is made up of c.45,000 pupils and 25,000 staff members. However, Yammer is only routinely used by an average of around 10,000 users per month.

The collaborative nature of Yammer presents a number of challenges related to moderation and safeguarding when it is used in an educational context where the

largest proportion of users are children. In particular, the All Company group in Yammer, which is visible to all users regardless of age or user type (e.g. pupil or teacher) cannot be switched off, meaning any content posted, whether inappropriate or not, is visible to anyone who accesses the All Company group.

In addition, Yammer does not allow for any restrictions around creation of groups, meaning pupils can create their own groups.

Security measures such as keyword monitoring have always been in place in Yammer. These allow inappropriate content and conversations to be identified and responded to. Each Glow service also includes a 'Report a Glow Concern' feature, allowing any user to submit concerns about content or behaviour in any area of Glow. However, we acknowledge that currently there is no truly effective tool to proactively check images for inappropriate content within the Glow environment.

There is an element of human moderation that takes place within Yammer from teaching staff that are active in the environment, this moderation could only be considered as partially effective as it is unrealistic to assume complete coverage of the entire environment.

#### Alternative services within Glow

When Yammer was launched in February 2016, it provided the only option for collaborative group working within the Microsoft product suite. However, in July 2017 an education version of Microsoft Teams was launched and in May 2018 Google Classroom was launched within Glow as an opt-in service of G Suite for Education.

#### Microsoft Teams

Teams provides the ability to set up a closed collaborative working environment for a group of users which allows conversation and sharing of resources. Class Teams have Assignment functionality and Class Notebooks, allowing teachers to use the product as an highly effective digital learning environment.

Teams provides the following additional benefits - only staff members within Glow may create a Team; Teams are always set as private; only members of a Team can view content or contribute to it; and private chat for students is disabled in Teams.

#### Google Classroom

Within G Suite for Education, Google Classroom provides the ability to set up a closed collaborative working environment for a group of learners and teachers. This allows assignments, documents and group conversations to be held.

Classroom provides the following additional benefits - only staff members can create Classrooms; Classrooms are always set as private and members can only be added by invite or join codes; and only members of a Classroom can view content or contribute to it.

There is the expectation that school staff should monitor student usage within their own Teams and Classrooms.

### **Conclusion**

Given the challenges outlined above, Yammer will remain unavailable for pupils but will continue to be accessible for staff. Microsoft Teams and Google Classroom will be promoted as alternative collaborative spaces for pupils.



# Glow - Yammer Review

December 2018

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DRAFT

## 1. Purpose

The need for a two year review of Yammer within Glow was established in February 2018.

The purpose of this was:

- to evaluate the use of Yammer as a tool for learning and teaching
- to review the data controls, moderation and technical details of Yammer
- to consider alternatives within the Glow O365 product offering which did not exist at Yammer launch.

## 2. Background and History

### 2.1 Introduction

Yammer is a private social network that is available to Glow through Office 365 A1 for Student and Faculty Educational Licenses. The product was acquired by Microsoft in 2012, and subsequently added to the Microsoft Office 365 product suite. It continues to be further integrated into the Office 365 product offering in its functionality and technical make up. Yammer is a web based service which is cross platform and supports most major web browsers, desktop and mobile operating systems. In addition, there are mobile apps for IOS and Android devices.

Access to Yammer in Glow is limited to users who have a Glow login and who have an Office 365 license associated with their Glow account. Glow accounts are available to all schools and education establishments across Scotland, including independent schools and teacher education colleges/universities. Scottish education partners who are involved in the delivery of the 3–18 curriculum can also gain access to Glow.

A Yammer network was setup by Education Scotland in March 2015 to ensure that all Glow domains were listed under a single structure, and to prevent Yammer networks being established by users without centralised co-ordination and controls. The Yammer network was not available to end users while initial testing was carried out.

In July 2015, further investigation of Yammer was approved after consideration by both Education Scotland's internal Digital Learning and Teaching Management Group (DMG) and Education Scotland's external Technical Operations Advisory Group (TOAG). Work during the development period involved consultations with local authority Glow Key Contacts and workshops with positive discussions regarding the educational benefits of Yammer and the improvement of the O365 offering within Glow.

DMG gave approval to launch the Yammer service in Glow in January 2016. Yammer was fully launched on 22 February of that year available to both staff and student users of Glow. External users and networks were disabled and remain so, leaving Glow Yammer as a closed network which is only accessible to school

learners and adults directly involved in the delivery of school education in Scotland. At that point there were no alternative products within Glow allowing collaborative working.

On 8 June 2018, access to Yammer was disabled to allow the removal of Yammer licenses for primary pupils initially, and latterly all learners, due to some concerns raised around inappropriate use of Yammer. The service was re-enabled on 2 July 2018 for staff only.

## 2.2 User Figures

In May 2018, Yammer had 69,811 registered users. There has been steady growth since adoption of, on average, 5,000 users per month. This is against an Office 365 Tenancy enabled user count of 934,203 – a 7.5% adoption rate.

As of May 2018, there were 15,454 primary students and 28,970 secondary students, across 2,619 establishments in Glow with Yammer accounts. A breakdown of users by parent establishment type (e.g. local authority, organisation, independent school) is included in the table below.

National Summary Establishment Type	User Counts			Grand Total
	Non-Teaching Staff	Student	Teaching Staff	
College	3	0	19	22
Combined	103	525	461	1089
Government Department	331	7	20	358
Local Authority	714	6	1088	1808
Nursery	278	0	47	325
Primary	1726	15454	9474	26654
Secondary	975	28970	7928	37873
Other Educational Establishment	123	136	392	651
Independent	5	32	92	129
University	1	42	859	902
<b>Grand Total</b>	<b>4258</b>	<b>45172</b>	<b>20380</b>	<b>69811</b>

Figure 1 –Yammer Usage by User Role and Establishment Type

Although users may have a current Yammer account, only 20% of enabled Yammer users were active in May 2018. The level of engagement within Yammer has remained largely consistent in the past year with, on average, 10,000 active users each month.

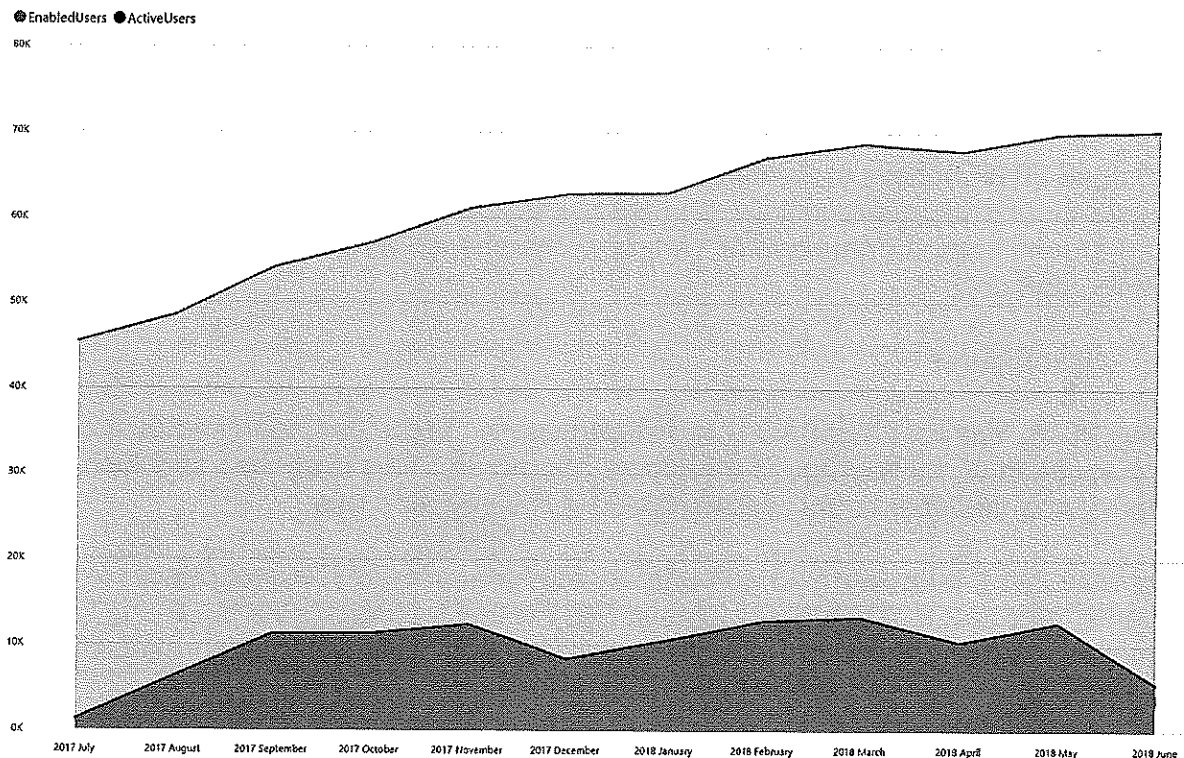


Figure 2 –Comparison of Enabled v Active Users in Yammer

### 3. Technical Information

The purpose of this section is to explore access methods, the technical structure of Yammer and its integration with Office 365.

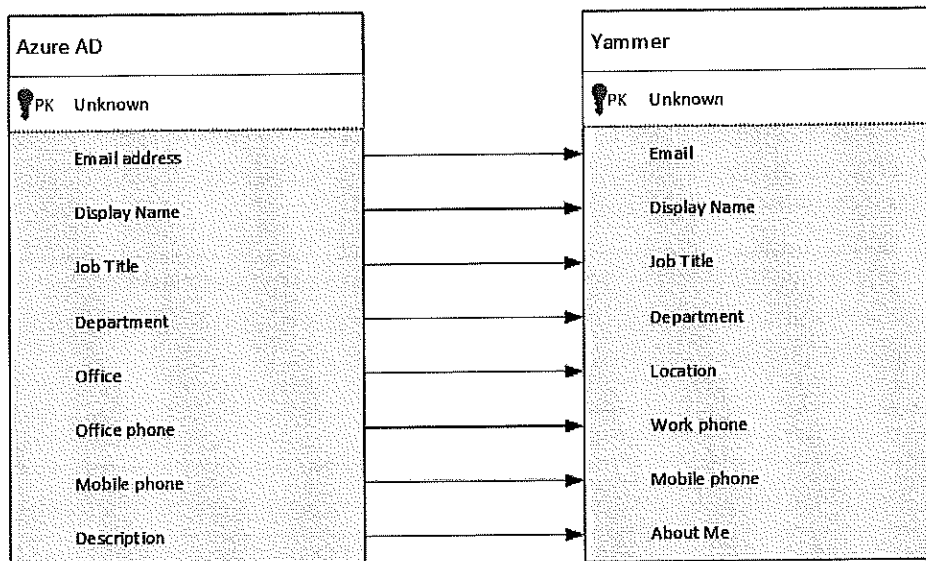
Yammer within Glow does not allow external membership and all members must have an Office 365 Glow account. Content posted within Yammer is not accessible by non-Glow users.

#### 3.1 User Creation within Yammer and Yammer Profiles

The Glowschools.org.uk Yammer network enforces Office 365 identity. A user is not provisioned with a Yammer account until they have clicked through to Yammer from the Office 365 app launcher or accessed Yammer through an alternative route and logged in using their Office 365 credentials. So although all licensed users are able to join Yammer they are not provisioned with an account until they take positive action.

On first login users are asked to accept the Glow Yammer Use Policy – reproduced in **Appendix 1 – Usage Policy**.

The user's Yammer profile is created using the properties from Office 365 (Azure Active Directory). A user can then edit all fields within their Yammer profile with the exception of email address. Yammer profile changes do not write back to Azure AD and are not overwritten unless a relevant field is updated within Azure AD. Only the changed field is updated within the Yammer profile.



**Figure 3 - Azure AD Fields to Yammer profile**

Within the Glow Office 365 tenancy the 'Department' field is used to hold the user's establishment e.g. school.

### 3.2 Group Creation

All Yammer networks have a single global group, 'All Company', which is visible to all users. There is no way of restricting posts to this group.

Yammer as a product is designed to allow collaborative working within user-created groups. There is no way to limit group creation to specific users.

As part of the increased integration of Yammer into Office 365 in 2017, Yammer Networks that met certain technical requirements were able to enable Office 365 connected groups. This creates a group within Yammer but with an Office 365 group as a wrapper to contain the membership. This allows the group to be used elsewhere within Office 365 and also enables access to other products within Office 365 to the group members. This includes a SharePoint document library, SharePoint Site, OneNote and Planner. Within Glow Office 365, group creation is limited to staff members only, so student-created Yammer groups remain internal to Yammer.

There is no visibility within Office 365 that a group originated from Yammer.

Groups created within the Glow Yammer network can be:

- Public Access (restricted to Glow users only) - within the Glow Yammer network all Glow Yammer users can view conversations and post to the group whether they have joined the group or not. Any Glow user can join a public

group without further approval. Group content will be returned in search results.

- Private Access – within the Glow Yammer network only group members can view conversations and post. A group admin must grant membership. Group content will not be returned in search results for non-members, although the group will be visible in the directory. Private groups may be created as unlisted, i.e. they do not appear in the directory. In this case, only group members will have visibility of the group within the web interface although the group will be visible within a data export.

Users can be added to a group when the group is created, subsequently added by another user or group admin or by joining public groups. Only a group admin (or the users themselves) can remove users from private groups.

### 3.3 Posts

Any user may make a post or reply to an existing post within public groups or private groups of which they are a member. It is not possible to pre-moderate posts or restrict posts to specific users. Users can be added to a conversation by being 'tagged' which means they could be included in individual conversations in groups that they may not be a member of.

In February 2018, the ability to move conversations between groups was introduced. This allows messages to be moved to more appropriate locations. However, as any user can initiate a move there is the possibility for the feature to be misused.

### 3.4 Messaging

Users within Yammer can send private messages to other users within the Glow Scotland Yammer network. These messages are private between the participants although all messages sent are recorded within the data export (see section 6.3)

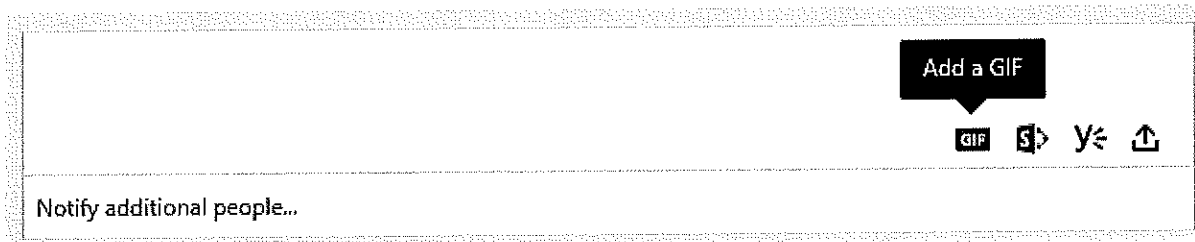
There is no ability to block messages from a specific user, although choosing "Stop following in Inbox" in the conversation has a similar effect. This can be circumvented by the sender "tagging" the recipient in the post.

### 3.5 Files

Users can post files to groups, conversations and private messages. There are no restrictions on file types that can be uploaded. A maximum of 25 files can be added to a post with the maximum size for a single file of 5GB.

Image and video files are displayed as a thumbnail under the post, with other files displayed as a link. Uploaded files are associated with the group they were uploaded to and are visible within the 'files' section of that group. Files uploaded to a group or as part of a conversation (in a group or private message) are stored within Azure.

The standard post dialog provides direct access to animated GIFs, via Tenor, through the GIFs option on message posts.



**Figure 4 –Yammer Post Interface**

There are no administrative controls available on the GIF feature in Yammer. Similar GIF functionality exists within Microsoft Teams but this can have different levels of restriction/control applied and be disabled by Team owners.

Files may also be uploaded to the associated SharePoint library for Office 365 groups, in which case they are stored within SharePoint.

The Microsoft Yammer roadmap anticipates SharePoint will become the default storage location for files uploaded to Office 365-connected groups during Q.1 of 2019.

#### 4. Educational Benefits and Usage

The mix of public and private groups within Yammer and the ability to list private groups within the directory allows users to easily identify groups relevant to their interests or to locate information. Alternatives like Microsoft Teams do not offer the same level of search and open access and require users to be aware of a group from sources outwith the product to be able to find and join Teams of interest. There is no equivalent to open public groups within Microsoft Teams or Google Classroom.

##### 4.1 Students

Yammer allows students to post work within an online community to either teacher-led or student-created groups. This provides a platform similar to other social media products but within a closed environment allowing students to become effective communicators and consumers of online products.

Learning can be supported by using Yammer as a collaborative working space for posting homework and assignments; group discussions and queries; and pupil lead learning.

There are a significant amount of 'off topic' conversations between students not directly related to class-based learning. Some of this activity leads to moderation action being required due to inappropriate content being posted.

### Example

Extracts from a case study from a primary school sharing approaches to Glow Yammer.

“We are using a private Yammer space to discuss our learning, share our ideas, support and encourage each other, collaborate on projects and provide constructive feedback. Involving learners in their learning and increasing the tools available for discussing learning is really at the heart of this work.”

“Through a combination of online and ‘real-life’ activities and discussions. Pupils are all able to access the Yammer group in school (on the ‘class-in-a-box’ netbooks) and freely add to the group. At the moment pupils are contributing in writing – either starting conversations or contributing to existing conversations. We are just beginning to experiment with sharing slide shows/documents that we have been working on – including collaborative files. As the teacher I have shared media files of pupil work and I anticipate that this is an area in which we will be developing over the coming term.”

“We have created a charter for using Yammer/Glow. Rather than have a list of do/don’t we decided to link our agreed actions to the UNCRC. Every child in the class has agreed to follow this charter. We’ve shared Our Charter for anyone interested in using or adapting it.”

“As a teacher and parent I feel that it is very important that we educate children about the safe use of social media – using Yammer has been a fantastic way to do so, in a safe environment. Feedback from parents has been positive.”

#### 4.2 Staff

Yammer provides a national collaborative platform for staff to engage with colleagues. Yammer groups have been created which tie into the National Improvement Framework (NIF), Professional Learning Communities (PLCs) and provide support for Career Long Professional Learning (CLPL).

Groups have been set up around Glow technology products e.g. O365 Teams and O365 Forms, to allow for peer-to-peer support, product feature updates and access to resources. Use has been made of groups to consult with Glow users and to test new features and functionality to improve the services available.

Local authority and school based groups exist to support education within specific curricular and geographical areas.

Some groups highlighting these uses have been listed below.

- A group facilitating collaboration between colleagues in a specific local authority’s establishments/teams to contribute to the development of their local improvement collaborative – 7852 members (private group, published in directory)

- Scottish Attainment Challenge – A community for hosting challenge conversations as part of the Scottish Attainment Challenge. Open to all Glow educators – 1578 members (private group, published in directory)
- STEM – This group is used to collaborate/share ideas/discuss/ask questions about any aspect of STEM – 797 members (public group)
- QAMSO – Private community for Quality Assurance & Moderation Support Officers – 610 members (private group, published in directory)
- A local authority group sharing discussion on using digital means to support learning in their area – 469 members (public group)
- O365 Teams – Views, requests, experiences, suggestions and concerns about Microsoft Teams and School Data Sync – 398 members (public group)

5. Moderation and Safeguarding

Yammer is designed as a social collaboration tool and as such contains a limited set of controls. There is no ability to apply restrictions to group creation or posting other than having to be a member of a private group to be able to view content and make posts. All users agree to the Community Guidelines (see **Appendix 1 – Usage Policy**) on joining and these are linked to on the home page of Yammer.

5.1 Report A Glow Concern

Staff users of Yammer are expected to challenge inappropriate behaviour and both staff and students are encouraged to use the Report a Glow Concern (RAGC) service to flag posts and content that are inappropriate due to language, images or contain concerning content.

The table below shows the number of concerns reported through the RAGC process for the last 6 months as well as the number of submissions that required action.

Dates	May-18	Jun-18	July-18	Aug-18	Sept-18	Oct-18	Nov-18
RAGC Requiring Action	20	8	5	4	5	1	3
RAGC NOT Requiring Action	4	10	0	19	18	14	12
<b>TOTAL Report a Concern Received</b>	<b>24</b>	<b>18</b>	<b>5</b>	<b>23</b>	<b>23</b>	<b>15</b>	<b>15</b>

**Figure 5 – Number of Concerns Reported via RAGC Process**

RAGC alerts that do not require action are due to false positives, technical support queries or hoax reports.

5.2 Keyword Monitoring

A list of regular expression keywords are flagged for monitoring. Use of these words in any post will result in the post being flagged to the Glow Service Management Team (SMT) by email but does not prevent the content being posted. The word list

is owned by SMT and is reviewed regularly, taking advice from safeguarding specialists. It contains words that are offensive, racist or indicate a possible safeguarding concern, e.g. self-harm, suicide or radicalisation. Management of the list is a manual process and is not supplemented by any external feeds.

There is a high likelihood that posts are flagged as false positives. For example, a keyword trigger for “suicide” may flag posts relating to Romeo and Juliet. Although common variants are included within the keyword monitoring list, it is possible that letter substitution may be used to avoid content being flagged.

Dates	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18
Yammer Alerts Requiring Action	13	28	43	38	27	51
Yammer Alerts NOT Requiring Action	128	143	153	256	181	280
<b>TOTAL Yammer Alerts Received</b>	<b>141</b>	<b>171</b>	<b>196</b>	<b>294</b>	<b>208</b>	<b>331</b>

**Figure 6 –Yammer Alerts**

### 5.3 Moderation

Retrospective moderation of posts is carried out by the SMT in response to automated emails raised by keyword monitoring triggers and RAGC submissions related to Yammer. Both of these are responded to during business hours through a monitored mailbox. RAGC web submissions also trigger text notifications and are monitored during office hours at weekends by a nominated on-call staff member. There is no evening on-call provision.

In addition, reports may be received by other contact methods or content discovered by staff during their normal use of Yammer.

“Private Content Mode” is enabled for the SMT staff through their Yammer administration accounts which allow them to view content they would not normally have access to, whether posted in public or private groups or in private messages. However they cannot search private content or messages and must have a direct link to the content from the report to allow them to review posts. If this is unavailable then audit logs need to be accessed through the data export mechanism. (see 6.3 Data Export)

There are currently no tools available within Yammer administration to proactively check images or files for inappropriate content.

### 5.4 Moderation Process

When a post is flagged to SMT through a keyword alert or RAGC, the post is manually reviewed in context to confirm what, if any, action is required.

As set out below, concerns are categorised according to perceived risk level and where required are escalated appropriately to a Local Authority Key Contact, Education Scotland Area Lead Officer (ALO) or Police Scotland.

Concern ID	Concern Type	Primary Escalation Point
1	Foul Language	Key Contact
2	Adult content - (sexual content / drug related content)	ALO – with Key Contact CC'd
3	Hate Speech (sectarian / racist / homophobic etc)	ALO – with Key Contact CC'd
4	Impersonating Users	ALO – with Key Contact CC'd
5	Bullying	ALO – with Key Contact CC'd
6	Self-Harm / Suicide	Police Scotland ALO – with Key Contact CC'd
7	Vulnerable child	Police Scotland ALO – with Key Contact CC'd
8	General Welfare / Neglect	ALO – with Key Contact CC'd
9	Grooming / Sexual Harassment	Police Scotland/ ALO – with Key Contact CC'd
10	Terrorism Threat / Speak	Police Scotland/ ALO – with Key Contact CC'd
N/A	Nonsense posts that are not overly offensive / concerning – but require deletion / warning	No escalation required – dealt with internally by SMT

**Figure 7 – Report a Glow Concern Categories**

Posts requiring moderation are recorded and deleted.

Historically, when a user was removed from Yammer their previous posts were not necessarily removed due to procedural and system constraints. Subsequently, the procedures were updated.

### 5.5 Moderation Challenges

The inability to restrict posts to the Yammer All Company group and globally control email notifications and content contained within update mails, increases the risk of inappropriate content reaching a wide user base.

The ability of users to change profile information adds complexity in identifying users.

Lack of global search within the product, even using Protected Content Mode, and the inability to block words proactively adds to the moderation challenges.

There are possibilities in addressing some of the limitations within Yammer natively by making use of third party products or developing bespoke solutions, e.g. using Microsoft Flow to automate actions. Education Scotland are exploring options available through existing planned procurements.

Only Education Scotland staff are enabled as Verified Network Admins which allows access to Private Content Mode and visibility of material posted in private

conversations and groups. Given the nature of the tenancy it would be difficult to devolve this role to local authority level.

## 5.6 Glow Customer Processes

Glow customers have indicated a range of approaches to informing users and parents/carers about use of Yammer in schools, ranging from no guidance, generic acceptable use policies to Yammer specific guidance.

Some examples of good practice include:

- A responsible user agreement, developed by learners and teachers, for use on the internet and devices which has links to Report a Glow Concern and Childline and is signed by both learner and parent/carer.
- A Glow charter, developed by teachers and learners, which encourages the safe and responsible use of Glow and refers to the use of 'Glow and Yammer'.
- Training on Yammer following its introduction including guidance on the Yammer Acceptable Use Policy with a reminder about the Glow Community Rules.
- Guidance on safe use of ICT and internet guidance for schools and parents – these include internet Acceptable Use Policies, internet rules posters and internet safety parent leaflets.
- A network of Digital Leaders at establishments, who are reminded regularly to discuss online safety and acceptable use before introducing learners to any services and to take an active role in moderating and reporting inappropriate content and behaviour.

## 6. Data Management

### 6.1 Yammer Enterprise

Microsoft offer two versions of the Yammer product: Yammer Basic and Yammer Enterprise.

Within Glow, a Yammer Enterprise network is used, with all users requiring a valid Office 365 account, and Yammer license before being able to join Yammer. Yammer Enterprise provides additional administrative features and controls.

### 6.2 Data Structure

The relationship between data from Office 365 and Yammer has been mapped within **Appendix 2 – Yammer Data Relationship**. Not all data transferred from Office 365, or added directly within Yammer is accessible to Administrators through either data export or the API.

## 6.3 Data Export

A data export is the recommended mechanism for compliance management and eDiscovery. It is the only mechanism available for auditing and tracking.

The data export is a .zip file that includes:

- Messages, MessageVersions, Users, Topics, and Groups in separate .CSV files: this contains complete details of each data type, such as message ID, timestamps, participants, group names, etc.
- Folders with Files: these contain Files on the network. Files will be in their native format. Note that exports will only contain Files created or modified during the time period specified for the export. It is possible to exclude this from the export.
- MessageThreadsOutbound.csv: Any external conversations that members of your network participate in in other networks.

Both the Network Data Export within the web interface and use of the API export produce the same output.

Further details relating to the Yammer network can be extracted using specific calls within the Yammer rest API published at <https://developer.yammer.com/docs/usersjson>. This includes full user profile information and group memberships – although this does not display group administrators.

Using these methods for compliance and audit requires strong technical understanding of the product. Tracing content and messages requires cross referencing from multiple sources and is a complex task.

## 6.4 User and Data Management

### 6.4.1 Self-Deletion

Users could previously remove themselves from Yammer by choosing to delete their account within their profile. This option was removed by Microsoft from Office 365 linked networks in early 2018. User deletion requests must now be processed by a Yammer Network Admin by choosing the appropriate option within the Yammer settings.

### 6.4.2 Office 365 Lifecycle – Automatic Account Management

Yammer accounts are linked to the user's Office 365 account status. When a user is blocked from sign in within Office 365, all Yammer sessions are terminated and a user will be prompted to log back in. Due to the status of their Office 365 account, they will be unable to do so. Within Glow this corresponds to a user pending deletion upon removal from Glow (currently 270 days after sign in blocked). There is no further action taken on the Yammer account.

When the Office 365 account is deleted or the Yammer license is removed, a user is marked as deactivated within Yammer. This suspends the user account and they will appear in the deactivated user list and in data exports as having been deactivated by System Administrator. After 90 days the Yammer account is permanently deleted. However without manual intervention by administrators, messages posted and profile information remain.

### 6.4.3 Yammer Account Manual Deletion Options

Within the Yammer web interface four options are available to manage a Yammer account:

1. Deactivate this user.
  - Marks the user as suspended. No login to Yammer is possible. Notifications from Yammer are not sent. If the account is not reactivated within 90 days it is automatically deleted.
2. Permanently remove this user, but retain their messages.
  - Marks the user as deleted. No login to Yammer is possible. Notifications from Yammer are not sent. Messages posted and profile are retained. The account cannot be reactivated and if the user were to re-join Yammer they would start with a new account. No further actions are possible on the account other than Erase this user.
3. Permanently remove this user, and remove their messages.
  - As above, however all messages posted are deleted. Profile information is retained.
4. Erase this user. Wipe their name and personal information, but leave their messages. (Can't be undone after 14 days).
  - Introduced in early 2018 as part of GDPR compliance work for Yammer. Erases user's Personally Identifiable Information (PII).

Unless a user's messages have been deleted by choosing option 3 'Permanently remove this user, and remove their messages' there is no simple method for retrospectively deleting their messages. To do so, messages posted would need to be identified through a data export and deleted within the Yammer web interface or through the Application Programme Interface (API) .

### 6.4.4 API

Within the API the only options available are to suspend or permanently delete a user, retaining their messages. There is no option to delete messages or erase user PII as part of the user deletion API. This has been flagged to Microsoft by Education Scotland and acknowledged as an issue. There is currently no timeframe for allowing user data to be removed en masse on an ad hoc basis or as part of data lifecycle management.

Individual messages can be deleted but would require the message IDs to be identified through a data export.

## 6.5 Data Location

Yammer data is stored in the United States. There are no options for Yammer users to locate data within the European Economic Area (EEA). Localisation of data was announced in late 2017 and planned for early 2018 but this was subsequently cancelled by Microsoft.

## 6.6 Age Restrictions

As Glow uses a Yammer Enterprise network, there are no restrictions based on age of users in Glow's use of Yammer.

Yammer Basic Networks are restricted to users age 13 or above as per the published terms of use.

## 7. Microsoft Teams

### 7.1 Background

When Yammer was launched in February 2016, it provided the only option for collaborative group working within the Microsoft product suite.

In September 2016, Classroom was launched as a preview Office 365 service within Glow. This was received positively and indications were this would continue to general availability. However in May 2017 it was announced that Classroom would be discontinued as a product as of July and instead an education version of Microsoft Teams was launched.

Teams allows public conversation within a group environment and the sharing of resources. Class Teams have Assignment functionality and Class Notebooks, allowing teachers to use the product as an highly effective digital learning environment.

In May 2018, there were 12,795 active users of Teams in Glow.

### 7.2 Types of Teams

Teams provides the ability to set up a closed collaborative working environment for a group of users. Within educational tenancies such as Glow, Teams can be created with specific structures to help support Classes, Professional Learning Communities or Staff Members.

Class Teams are always set as private, however all other types of Teams can be set as public or private by Team Owners. Members may search for and join public teams without approval, however the search facility for Teams is not as user friendly or efficient as Yammer's. Private Teams can only be joined if a user is added by a Team Owner or a join code is used.

Only members of a Team can view content or contribute to it.

There is currently no external guest access to Teams meaning only Glow users may be Team members.

### 7.3 School Data Sync (SDS)

Teams for individual school classes can be automatically created and membership established using data provided by SEEMiS. This functionality is available at school level on an opt-in basis. There are currently over 100 schools in Scotland using SDS to create Class Teams.

### 7.4 Join Codes

Introduced in summer 2018, join codes give Team owners the ability to generate a code to be shared or published which allows users to join any Team. This simplifies Team management as a code could be issued to a class to allow them to self-join a team. The code can be reset to prevent use beyond its required lifecycle.

### 7.5 Safeguarding and Moderation

Only staff members within Glow may create a Team. It is, however, possible for a staff member to leave an existing Team, leaving only students within the Team. Education Scotland guidance on the use of Teams encourages the inclusion of a second teacher as a mitigation.

There is the expectation that school staff should monitor student usage within their own Teams. There is no global monitoring possible although full audit logs are maintained and could be used retrospectively for investigation.

Private chat for students is disabled in Teams.

## 8. Google Classroom

### 8.1 Background

After an initial pilot phase, G Suite for Education was launched within Glow as an opt-in alternative learning environment in May 2018. As of August 2018, 12 local authorities had opted in to using the service.

Within G Suite for Education, Google Classroom is available allowing closed working environments for learners and teachers. This allows assignments, documents and group conversations to be held. Each local authority using G Suite has their own tenancy which is set up using the same configuration.

In November 2018 there were 41,922 active users in the Google Classroom service.

## 8.2 Types of Classroom

Google Classroom provides the ability to set up a closed collaborative working environment for a group of users. Within educational tenancies such as Glow, Classrooms can be created with specific structures to help support classes, Professional Learning Communities or staff members.

Classrooms are always set as private and members can only be added by invite or join codes. Only members of a Classroom can view content or contribute to it. Teachers within a Classroom have the ability to enable and disable students from commenting in the group conversation. This is enabled by default.

There is currently no external guest access to Classroom meaning only Glow users may be Classroom members.

## 8.3 Join Codes

Join codes can be used to give teachers the ability to generate a code to be shared or published which allows users to join any Classroom. This simplifies Classroom management as a code could be issued to a class to allow them to self-join a team. The code can be reset to prevent use beyond its required lifecycle.

## 8.4 Safeguarding and Moderation

Only staff members within Glow may create a Classroom. However, it is possible for a staff member to leave an existing Classroom, leaving only students within the Classroom. This does not present a high risk as a Classroom without a teacher mutes all students so they cannot interact with the working environment and it becomes read only. Education Scotland guidance on the use of Classrooms encourages the inclusion of a second teacher as a further mitigation.

There is the expectation that school staff should monitor student usage within their own Classrooms. There is no global monitoring possible although full audit logs are maintained and could be used retrospectively for investigation.

## 9. Conclusion

Yammer provides a valuable and well utilised collaborative platform for staff which facilitates professional dialogue, peer learning and more. National groups such as those named in section 4.2 are supporting collaboration and implementation of national policy in schools across Scotland. The ability to search the whole Glow Yammer network for relevant content, as well as open access to information, make this an invaluable tool for school staff.

Whilst the value of Yammer purely in terms of educational potential is clear, the challenges related to control, moderation and safeguarding make Yammer a more difficult environment to manage in a tenancy such as Glow. Whilst there a number of very positive examples of the use of Yammer to support pupil learning, the open nature of the platform and the inherent challenges, has resulted in a significant

volume of non-education related posts and groups being created by learners. This has the potential to undermine the educational experience for learners and detract from the benefits that could be realised.

Microsoft Teams provides a good alternative for learner collaboration which provides similar functionality to Yammer. The ability to restrict creation of groups to staff members and to disable chat between learners when required, make Teams a more straightforward network to manage in terms of pupil behaviour. Google Classroom is also available as an opt-in service and can be used in a similar way.

#### 10. Next steps

Given the findings of the review around Yammer use and the availability of Microsoft Teams and Google Classroom through Glow, Yammer access will not be reinstated for learners. Instead, Education Scotland will promote Microsoft Teams and Google Classroom as viable alternatives for collaborative online working. In addition, detailed guidance for staff in how to set up, manage and moderate Teams and Classroom will be provided.

Education Scotland will continue to explore options for further safeguarding products and processes that will further strengthen the safety and security of Glow. In addition, existing moderation processes in Glow will continue to be under regular review.

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## Appendix 1 – Usage Policy

At all times, users of Yammer must adhere to the Glow Community Rules:  
<https://glowconnect.org.uk/security-and-privacy/glow-community-rules/>

### Be Secure

- Always keep your Glow password to yourself.
- Always sign out of Glow when no longer using it.

### Be Polite

- Always treat others with respect.
- Never post or share a message, document, image, video or any other content that is inappropriate or likely to cause harm or offence to others.

### Be Safe

- Always remember to be careful when communicating over the internet – other users may not be who they seem.
- Don't share your personal details with other people.
- Never agree to meet someone in person who you have only met on the internet unless accompanied by a parent, carer or other known and trusted adult.
- Speak to an adult immediately if you see a message, image or anything else on the internet that concerns you

### Be Legal

- Never post or share a message, document, image, video or any other other content that you do not have permission to use.

### Be Responsible

- Always be mindful that once you put something online, that information may be beyond your control.
- Never post or share a message, document, image, video or any other content online that you would not wish other learners, teachers, or parents to see.
- Remember that anything you do can be traced back to you.
- If you misuse Glow, this can be reported to your school.

If you spot something that doesn't follow these Rules

Please report it here: <https://reportaconcern.glowscotland.org.uk/>

**NOTICE:** All access, use and content on this network is monitored by Glow to manage performance, security, and compliance with Glow Community Rules. At the discretion of Yammer administrators, content including files, notes, posts, links and groups may be renamed or removed.

## Appendix 2 – Yammer Data Relationship

