

**REPORT TO EDUCATION AND CHILDREN'S SERVICES COMMITTEE – 31
AUGUST 2017****SCRUTINY REFERRAL FROM AUDIT COMMITTEE - GLOW****1 Recommendations**

The Committee is recommended to:

- 1.1 Consider and determine the request from the Audit Committee to conduct the Committee Review Process in respect of the matter of service delivery identified by the Audit Committee for improvement.**
- 1.2 Consider that this Report provides the necessary information to constitute a formal Stage 1 Report in terms of the Scrutiny at Aberdeenshire process.**
- 1.3 Consider whether the Report provides sufficient re-assurance to the Committee.**
- 1.4 Instruct the Head of Resources and Performance to report to Audit Committee on 21 September 2017 with the Committee's decision.**
- 1.5 If required, and sufficient reassurance has not been provided, and the Committee then determines to conduct the Committee Review Process, to agree the timetable.**

2 Background / Discussion

- 2.1 At a meeting of the Audit Committee on 29 March 2017, the Audit Committee received an Internal Audit Report. The Audit Committee identified a matter of service delivery for improvement being increased use of technology in schools by means of a focused ICT strategy to enhance learning and teaching ensuring best value is achieved. The relevant extract of the report and the minute of the meeting is in Appendix 1. At a subsequent meeting of the Audit Committee on 21 June 2017, the Audit Committee noted that the referral was still outstanding and made a further referral to this Committee with a specified timescale of three months.
- 2.2 The Audit Committee have powers relating to scrutiny of service delivery. Section G.2.2 of Part 2A of the Scheme of Governance allows the Audit Committee to request that a policy committee conduct the Committee Review Process (CRP) in respect of a matter of service delivery, identified in an audit report for improvement.
- 2.3 [Part 4A](#) of the Scheme of Governance sets out how scrutiny at Aberdeenshire Council is carried out.
- 2.4 The Committee Review Process is a three-stage process, the first stage being a report to the relevant Committee to provide further information on the issue

and any action to be taken as a result of the scrutiny activity. The Service considered that it was appropriate in the circumstances to provide as much information to the Committee at this stage following the referral from the Audit Committee. The Committee is requested to consider whether the information in Appendix 2 detailing the educational benefits provided by Glow to a range of stakeholders including teachers, pupils and parents and the action plan to support uptake of Glow; allows the report to be accepted as a Stage 1 Report.

- 2.5 In relation to the referral, the Service's detailed background, explanation and comments on the Glow system are contained in Appendix 2. Glow is national intranet enabling the sharing of educational information and best practice and is financially supported by the Scottish Government, ensuring the educational benefits secured are achieving best value.
- 2.6 The Scrutiny at Aberdeenshire process sets out that the options for Committee are:-
 - 2.6.1 If the Committee is satisfied that this report provides sufficient reassurance, this report will be presented to the Audit Committee on September 21 2017 as evidence that the scrutiny has been undertaken and that the Committee are satisfied that Glow represents the best solution in terms of educational benefits and best value.
 - 2.6.2 If the Committee are not minded to agree that this report provides sufficient reassurance, then the Head of Resources and Performance will report to the Audit Committee with the Committee's decision as per recommendation 1.5.
- 2.7 In accordance with Section G.2.2.b of Part 2A of the Scheme of Governance, if the Audit Committee determines that sufficient reassurance has not been provided then the Audit Committee may conduct the CRP and then report its recommendations to the Education and Children's Services Committee.
- 2.8 If a report is not received by the Audit Committee on 21 September 2017, then the three month specified timescale has been not achieved and the Audit Committee may proceed to conduct the CRP.
- 2.9 The Head of Finance and Monitoring Officer within Business Services have been consulted in the preparation of this report and their comments are incorporated within the report and are satisfied that the report complies with the Scheme of Governance and relevant legislation.

3 Scheme of Governance

The Committee is able to consider and take a decision on this item in terms of Section E.1.1.b of the List of Committee Powers in Part 2A of the Scheme of Governance as the matter relates to Education and Section E.7 as the matter relates to the scrutiny of an education related matter of service delivery identified for improvement.

4 Equalities, Staffing and Financial Implications

- 4.1 An equality impact assessment is not required because the report is asking the Committee to discuss and comment on Internal Audit recommendations and there will be no differential impact on any of the protected characteristics.
- 4.2 There are no direct staffing and financial implications arising from this report.

Maria Walker
Director of Education and Children's Services

Report prepared by Edwin Duncan, ECS Business Support & Development Manager

Date 17 August 2017

Appendix 1**Extract from Audit Committee Report - Internal Audit Reports: 29 March 2017**

Glow, a purpose-built digital learning solution which supports the delivery of Curriculum for Excellence, is funded by the Scottish Government and is available to all schools across Scotland. Scholar, an online programme which provides resources and learning material for all pupils undertaking Scottish Qualification Authority exams, is funded by local authorities and available in secondary schools. There are inconsistencies in the use of both systems across Aberdeenshire schools. The Service has agreed to highlight low usage through an annual report to the ECS ICT Strategy Group and develop a focussed strategy to increase the use of the systems to enhance learning and teaching. This action will be included in the LTT Improvement Plan for 2017/18.

Financial Regulations were not complied with and best value was not demonstrated in relation to the procurement of Show My Homework and the use of the Crown Commercial Service framework agreement when procuring ICT hardware for schools as part of the "ICT PC Refresh" programme. The Service has agreed to consider whether Glow should be used as an alternative, more cost-effective solution to Show My Homework. If an alternative to Glow is considered the best option, the Service will ensure the contract is procured in compliance with Financial Regulations. The Service has also agreed to work with Commercial and Procurement Services to ensure the conditions of framework agreements are complied with when used to procure ICT equipment in future.

Extract from Minute of 29 March 2017 Audit Committee Minute

in respect of, Information Technology in Schools, request ECS Committee consider undertaking Stage 1 of the Committee Review Process in relation to whether Glow is a suitable solution and the timescales for this to be introduced,

Appendix 2

Glow - Background

What is Glow?

Glow is the national intranet for Scotland's schools and provides a safe place for learners to share work and collaborate with others. Glow provides a username and password that gives Scottish learners and educators access to a number of core web services and online resources for education. Glow accounts are available to all schools and education establishments across Scotland, including independent schools and teacher education colleges/universities.

Glow is funded by the Scottish Government and, as such, there is no intrinsic cost to Aberdeenshire Council. As there is no cost to the council this means that Glow represents best value of the three resources discussed in this paper.

Glow provides a variety of safe and secure cloud-based services for collaborative, innovative and social learning, co-creation, easy web publishing.

In the early days of Glow preparation work began with an investigatory phase known as "Phase Zero", which involved checking that Glow could interface with SEEMiS, the management information systems of the 32 Education Authorities in Scotland, in order to provision the anticipated 800,000 user accounts. Glow was then piloted over a number of stages, and at each stage further functionality was introduced and tested.

Up and running by 2009, it became the world's first national education intranet. A substantial review of the Glow services was undertaken in 2012, which resulted in a wider range of tools and simpler user interface, incorporating industry standard tools such as Microsoft Office 365. A procurement exercise of the Glow tools has just been concluded, resulting in the current range of tools continuing for up to a further 10 years with the addition of the Google G-Suite tools being available from September 2017.

Education Scotland state "The main purpose of Glow is to enhance the quality of learning and teaching in the classroom by fully supporting the delivery of Curriculum for Excellence. Glow is the national Intranet for Scotland's schools and provides a safe place for learners to share work, collaborate with others. The full Glow service is web-delivered and browser-based, enabling access from school, home or anywhere that internet access is possible.

The Glow system provides access to a variety of collaboration tools within a secure, password authenticated environment. These include:

- **Glow Meet** - A web conferencing service which runs on Adobe Connect software.
- **Glow Blogs** - Blogs provide a powerful and flexible tool for collaborative learning □
- **Newsfeed** - A text based chat client which allows for no, full or partial moderation.
- **Yammer** - An instant messaging system accessible by every teacher and learner with a Glow account.
- **Glow Mail** - A web based email service available to Glow users.
- **Microsoft Teams for Education** (NEW - Coming July 2017) - An integrated Virtual Learning Environment (VLE) allowing simple set up of classes allowing teachers and learners 24/7 interactive access to learning materials. Teachers can assign work, mark their submissions, record student progress and provide timely feedback to learners individually or as a group

- **Glow Groups** - Sub-sites which can be created by teachers in each establishment for a variety of purposes, such as a class group, a curricular subject group, or a group for staff collaboration. Groups also exist at a National Level for each curricular area to encourage collaboration across the country.
- **G-Suite for Education** (NEW - Due September 2017) Core services include Gmail, Calendar, Classroom, Contacts, Drive, Docs, Forms, Groups, Sheets, Sites, Slides, Talk/Hangouts and Vault and all of these tools are freely accessible within Glow.
- **Document Stores** – Personal and shared file storage areas, enabling access both in and out school.

National Advice that supports use of digital technology (including Glow)

- Curriculum for Excellence: [Our young people are successful learners, confident individuals, effective contributors and responsible citizens.](#)
- [Enhancing Learning and Teaching through use of Digital Technology \(A National Strategy\)](#)
- [How Good is Our School 4 \(HGIOS4\)](#)
- BTC series of publications: [Learning Together, Improving Teaching, Improving Learning](#)
- [Building Society report: Young People's experiences and outcomes in the technologies](#)
- [Wood Commission report on Developing Scotland's Young Workforce](#)

Benefits of Using Glow

The Glow environment for learning supports Curriculum for Excellence:

For learners:

- A tool to access the benefits of the internet and a range of online resources and services via one log-In
- A space for collaborating with other learners
- A facility to connect with teachers about assignments and learning
- A space to create and innovate as you learn

For educators:

- A tool to access and develop high quality, relevant learning content
- A space for collaboration and interaction with other educators across Scotland
- A way to access files and materials anywhere, anytime using different devices □ A facility to build learning resources for classes and pupils

Aberdeenshire Approach

The ECS ICT Strategy Board receives regular reports on GLOW implementation, most recently on 21 June. It was agreed a proactive approach to promoting GLOW, encouraging use in the context of improving learning and teaching opportunities for young people.

Specific actions included:-

- Provide access to quality professional development opportunities in how best to use Glow in learning.
- Professional Development opportunities at Cluster Academy schools as twilights
- Professional Development opportunities as requested by school senior management
- Working with teachers and learners as requested in classrooms
- Providing interactive, multimedia information on key features of Glow and O365 on a dedicated Glow Site
- Provide telephone and email help as required
- Work with National groups such as: The Digital Directorate at the Scottish Government, National Digital Learning Forum (NDLF), Education Scotland, Glow Key Contacts, RM Education, Scottish ICT Development Group (SICTDG) and others as required to represent the needs of all learners and staff using Glow in Aberdeenshire.
- The Learning through Technology Team (LTT) are the Glow Key Contacts for Aberdeenshire.

➤ Impact

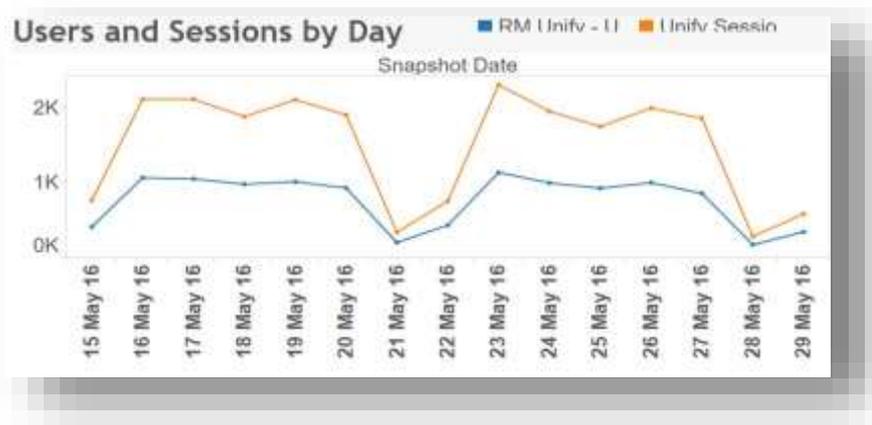
- Improvement in the Digital Skills of learners and staff
- Learners will be better engaged in using Glow as a valuable learning resource where information is safely stored.
- Learners will be better placed to share and collaborate experiences with other learners across Cluster. LA and Scotland
- Learners can use Glow to share work with parents
- Learners extend the school day to show learning at home
- Learners have access to quality learning resources 24/7
- Learners can use mobile technology to access resources in Glow

➤ Usage of Glow

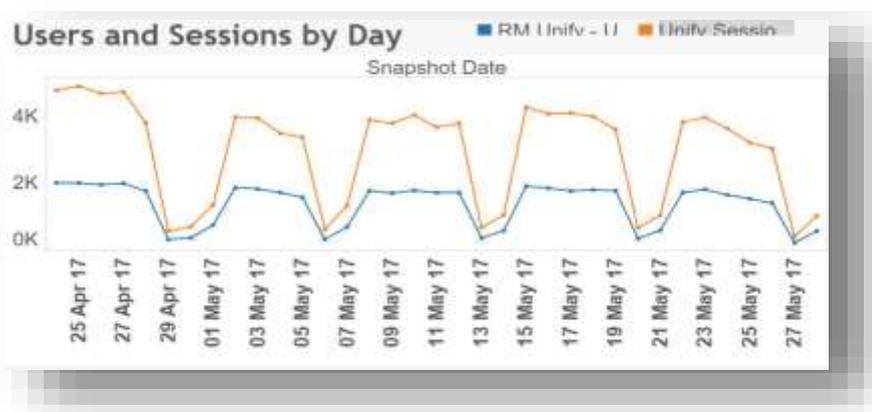
Across Aberdeenshire and across all other Local Authorities the usage of Glow is variable. Where it is being used effectively learners are seeing the benefit. In Aberdeenshire the aim is to improve the usage to benefit learning and teaching over the next three years.

Baseline Glow use to be taken from monthly Glow usage reports by Learning Through Technologies Team. This data will be passed to Quality Improvement Officers (QIOs) who will monitor usage and effective practice. The QIO Team will encourage schools to use Glow in their daily practice. For example, the schools 'daily/weekly bulletin' should be accessed from Glow. In the first year a 20% increase in Glow usage has been targeted. Therefore, a baseline usage figure for each school has been established. (Based on usage figure as at March 2017).

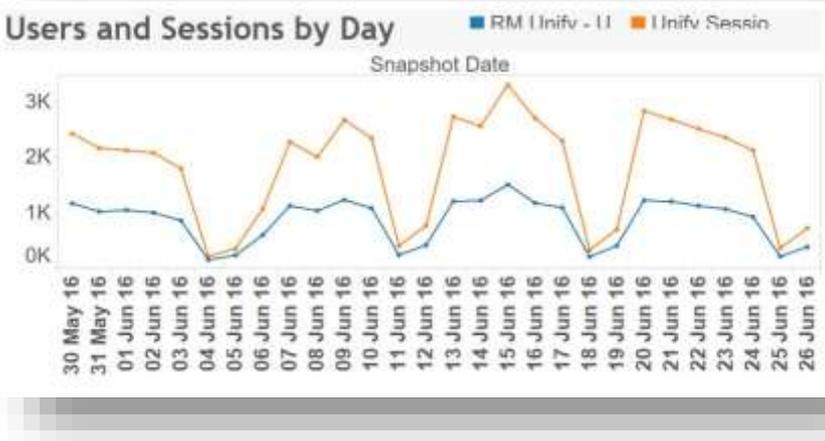
The following Graphs show the number of unique Glow users and the number of times those users made use of Glow in equivalent months in 2016 and 2017. As can be seen in 2017 there is overall increase in the number of unique users and the number of time they have accessed resources in Glow. The blue trace represents the number of unique users and the orange the number of times they have used Glow services. This comparison data was only made available from mid May 2016.



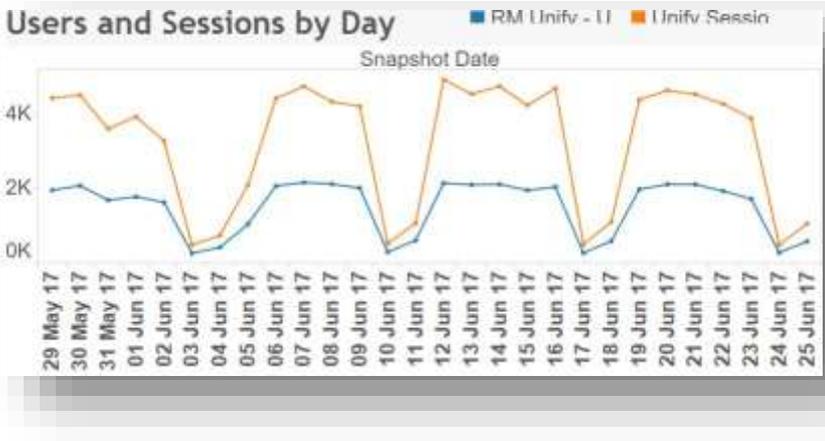
Graph above shows statistics for **May 2016**



Graph above shows statistics for **May 2017**



Graph above shows statistics for June 2016



Graph above shows statistics for June 2017

Whilst taking part in Quality Improvement Visits (QIVs) QIOs will monitor the use of Glow with a view to improving learning and teaching. Good practice will be highlighted as part of the QIV Report. This good practice will be shared with the information on using technologies, including Glow, will be referenced in the QIV Report as part of HGIOS4 *Quality Indicator 3.3 Increasing creativity and employability*.

Training Plan

Summary

- Twilight sessions open in Cluster Academies (x3)
- Professional Support Group (PSG) visits (request already made to every PSG) (x1)
- Bespoke in school / in class training can be arranged
- Video help material in Glow to be viewed as required

How will we deliver Glow Training?

Core Training Delivery 2016-2019		
Training Opportunity	Frequency	Comments
Twilight Sessions (basic introduction)	34 opportunities each year	Basic training reaches up to 680 staff in 2 terms (approx. 17% of staff, per annum, 51% over plan dates)
Twilight Sessions (advanced training)	17 opportunities each year	Advanced training reaches up to 340 staff in 1 term (approx. 8.5% of staff per annum, 25.5% over plan dates)
Glow twilight sessions – Potential reach over 3 years		1040 attendees (25.5% of teachers) per annum 3120 attendees (78% of teachers) over 3 years of training plan
Glow twilight session comments		Sessions are delivered by LTT team with a 1.5 hour session costing approximately £30 (salary costs for 2 team members) (£0.66p per delegate)
Compulsory Meetings, Training & Advice		
Director /HoS		Promote Glow as the intranet to be used in learning and teaching
PHTC	4 meetings per year	Glow updates, training opportunities, sharing of data from sessions delivered. Sharing Glow usage data (Compulsory attendance) (30 minute allocation)
ASHTA	4 meetings per year	Glow updates, training opportunities, sharing of data from sessions delivered. Advice given on best practice including that

		daily bulletins are accessed through Glow (Compulsory attendance) (30 minute allocation)
PSG meetings	1x each curricular area per year	Glow updates, training opportunities, sharing of data from sessions delivered Sharing Glow usage data (Compulsory attendance) (30 minute allocation)
HT Area Days	Every occurrence	Glow and other digital technology presentations (45 minute allocation)
ASPECTS / ASN teams	1/2 day training per annum	Glow updates and also training linking to accessibility features.
QIO and QIM	1 day training per annum	Whole day delivery. Comprising updates on training delivered, including details of schools where delegates have attended, Glow updates, hands on workshop. Delivered in 3 locations for North, Central and South Aberdeenshire to accommodate QIO and QIM remits. This session will also show how other technologies interface with Glow. Training will include hints on how to interrogate, and evaluate school usage and report following QIV's.
Education Support Officers / DO's	4 meetings per annum	Basic and advanced training in using Glow for learning and teaching. Officers to add appropriate, dynamic and interactive content to the Curriculum tiles to share across all schools
Educational Psychology	1 day training per annum	Glow updates, training opportunities, sharing of data from sessions delivered, Glow and O365 tools, sharing opportunities
From session 2017/2018 Identify in each school a teacher who would link with the Learning through Technology Team. This link teacher completes CLPL to cascade to school colleagues on how to use Glow and other digital tools effectively in learning and teaching	1/2 day training per annum	1/2 day delivery. Comprising Glow updates, hands on workshops Delivered in 3 locations for North, Central and South Aberdeenshire to accommodate cluster geography. This session will also show how other technologies interface with Glow.
School requests (not compulsory) but could be as directed by QIO teams	as required	Training to teachers and learners in using Glow to enhance learning experiences, also demonstrating how other technologies link into Glow.

SCHOLAR

Scholar is an online resource developed by Heriot-Watt University which provides resources and learning material for pupils undertaking Scottish Qualification Authority (SQA) examinations. All of the learning materials are written by teachers.

There is a partnership agreement between Heriot-Watt University and The Association of Directors of Education in Scotland (ADES). This partnership commenced on August 1st 2004 and all Local Authorities are Members within this partnership

There is an annual cost to Scholar in the region of £36,000. The procurement of this service has been approved by Committee. Scholar is a unique product that is continually being improved with the addition of new subjects and levels (ie National 5). This product represents good value for money.

The Scholar online resource as provided is the only such service available to support students and teachers in preparation for SQA examinations.

The Scholar programme offers subjects which provide a route into careers in science, engineering, business and modern languages.

Scholar provides an integrated set of materials and services which meet the needs of both students and their teachers. These resources include:

- comprehensive online interactive learning materials, activities, assessments and revision packs;
- access to online communities, resources, monitoring information and information tools;
- study guides which contain key reference materials and learning activities;
- tutor notes with valuable curriculum and planning information.

The number of courses (Advanced Higher, Higher, National 5 and Level 3) has increased considerably since the launch of SCHOLAR in 2000 and now stands at over 30. There is planned development of further courses with intriguing possibilities in adaptive learning and augmented reality

The courses currently offered are:

STEM Subjects			
	Advanced Higher	Higher	National 5
Biology			
Chemistry			
Computing Science			
Human Biology			
Maths			
Physics			
BUSINESS Subjects			
Accounting			
Art and Design (textiles)			
Business Management			
Economics			
Psychology			

LANGUAGE Subjects			
	Advanced Higher	Higher	National 5
English			
ESOL			
French			
Gaelic			
German			
Mandarin			
Spanish			

Level 3 Subjects	
	Level 3
Science	
Geography, Geology and Environmental Science	

Support for Scholar in Aberdeenshire

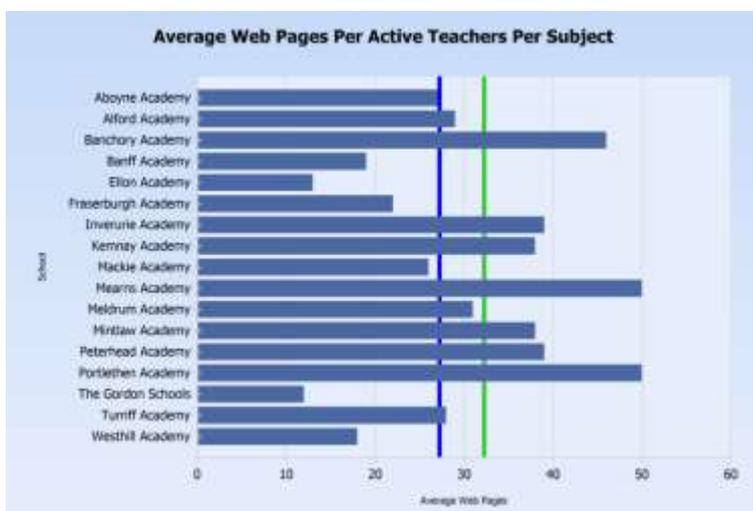
The Learning Through Technology Team (LTTT), supported by Fiona Cruickshanks QIO are the main contacts for Scholar in Aberdeenshire.

The LTTT work with a local Scholar employed co-ordinator and together organise and target training and advice sessions.

The LTTT initiated a Scholar contact in each Academy and meet biannually and discuss scholar usage (teacher and student), potential new courses, any issues, positive or negative and share best practice.

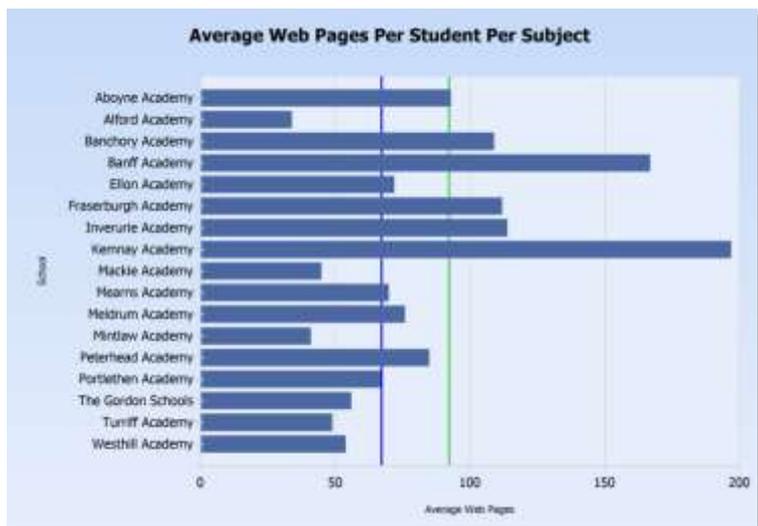
The LTTT receive data in July and January from Scholar detailing the Scholar usage for all Aberdeenshire Academies. This data allows discussions with School contacts and the Scholar co-ordinator to address any issues.

The image below shows teacher usage from Jun '16 to Jan '17.



In the time period 64% of schools exceed the average teacher use of Scholar and 41% exceeded the national average

The image below shows Advanced Higher student usage from Jun '16 to Jan '17.



In the time period 64% of schools exceed the average student use of Scholar and 35% exceeded the national average.

The Scholar information is sent to each Academy school contact and to the Head Teacher.

In addition to the support given to schools, the Scholar co-ordinator with support from the LTTT is to target PSG groups.

General Information

The Scholar resources are password protected and each student who is studying any of the courses above is given a unique login. This login personalises learning by allowing the student to track his or her progress. Additional services for students include individual study plans, online homework and revision sessions.

Teachers have access to every students account and can effectively track and monitor progress and save any reports generated. The reports are easy to use and, for example, at a glance, teachers can identify students that are struggling with assessments or identify if a class are struggling to answer a particular question in one of the assessments, it therefore can help teachers to quickly identify potential problem areas that can then be redressed in class.

A helpful video describing the comprehensive reporting system within Scholar can be found at the following link (<https://youtu.be/6Hclg3OJ0es>)

The resource allows for 24/7 access via any internet enabled device, including Smartphones to materials and resources directly related to SQA courses.

The Learning through Technology Team provide a 'tile' in Glow that allow students to access their Scholar resources.

SHOW MY HOMEWORK INFORMATION

Show My Homework (SMHW) is an online homework solution that enable schools to easily and effectively track and monitor homework. It allows teachers to set homework tasks in a matter of minutes, and eradicate homework excuses by providing students with access to all homework and resources online. The reporting system means that any teacher or staff member can see at a glance, the quantity and quality of work being set by individual teachers, departments, or year groups.

Show My Homework is currently being used by ten of our seventeen secondary schools. At present none of our primary schools or special schools have shown any interest in using this resource. In order to use SMHW schools need to purchase a yearly subscription. Since April 2014 £39,000 has been spent by the schools using SMHW. To continue using Show My Homework schools will need to continue paying the subscription every year. After the initial subscription any extra modules need to be purchased. Also if additional training is required this needs to be purchased by the schools as well. The schools that have purchased this resource report high usage. Most of the functionality that is available in Show My Homework was available in Glow using Microsoft Classroom, and in the next few weeks there will be additional functionality available in Microsoft Teams for Education including parental access. Glow is available to all schools at no cost. Show My Homework does not represent best value to Aberdeenshire Council.

The main features of Show My Homework are:-

Homework Tasks

Reports

Gradebook

Notice Board

Resources

Homework Calendar

To-do List

Insights

Mobile Apps

Homework Tasks

Teachers can use this to set homework for pupils.

Assignments are the most common and widely-used task on Show My Homework. It's a simple homework that can be handed in online or in class.

Differentiated Homework enables teachers to set personalised learning tasks for students, catering for all learning abilities. Any task can have up to five different categories, or "trays". Within each of these trays are different tasks.

Quizzes are a way to test students on the knowledge they've gained in class. All Quizzes are automatically graded saving time spent on marking and providing students with instant feedback. Teachers can set multiple choice questions for students to answer within a time limit, or they can be given unlimited time to answer.

Spelling Tests use text-to-speech technology to convert words into audio files. When students take the test, they will be prompted to enter the spelling after hearing a word.

Teachers can also provide definitions or sentences for context. Again, with all Spelling Tests graded automatically, teachers have less marking to worry about.

Class Tests can be used to schedule reminders for important dates at school. Teachers can add materials to prepare for tests, previews of tests, or any other resources they might want to share.

Reports

A variety of reports can be generated in Show My Homework.

School Overview Report provides a general overview of homework being set across the school, filter by year, subject and teacher.

Student Submission Report enables teachers to track student performance and monitor homework hand-in rates.

The Issued Homework Report provides details about tasks issued on Show My Homework by teachers in school. The report shows the different types of homework that are being set (Spelling Tests, Quizzes or Differentiated Homework).

Homework Frequency Report enables teachers to observe trends in the quantity of homework set in school, week by week, for categories as broad as an entire year group or as specific as a single teacher.

The User Activity Report allows teachers to monitor whether students, teachers, and parents are actively using SMHW.

The Parents' Evening Report generates an overview of a student's homework history, including homework title, due date, submission status and grade received.

The Tutor's Report allows tutors to check how much outstanding homework the students have.

Gradebook

The online gradebook allows teachers to review the grades and submissions they have marked for a class throughout the year.

Notice Board

An easy way to keep students, teachers and parents informed about important school Announcements and upcoming Events. Whenever an Announcement or Event is posted, users will receive a notification and a reminder will appear in their calendar. Teachers can use this to set Events and Announcements to class groups, year groups, or even the whole school. This is a good way to get information out to students and parents quickly.

Resources

All homework created is stored in the Resources area

Homework Calendar

The public Homework Calendar allows teachers, students and parents to view all homework that has been set throughout the school and is available without a login. The personal Homework Calendar shows teachers, students and parents' homework that is relevant to them and is accessible once they have logged into their account.

To-do List

Each student, when logged in, has access to a personalised To-do List. Students are able to mark items as complete and move them into the Completed tab. Tasks are arranged so that homework with the nearest due date appears first. Parents can also view their child's To-do List once logged in but are unable to mark tasks as completed.

Insights

This allows teachers to see a detailed breakdown of information about their tasks. They can view how many students and parents have viewed the task as well as track the number of submissions.

Homework Insights

Teachers can view how students and parents are interacting with specific homework tasks they've set. They are able to see how many parents and students have viewed their homework, total number of homework views since the issue date and how many students have downloaded or viewed relevant resources.

Class Insights

With this, teachers are able to retrieve submission statistics for a specific class over the academic year:

Student Insights

View information and submission statistics for an individual student, view their profile and see a breakdown of tasks set for them for the week and see the percentage of tasks in each submission status over the academic year e.g. submitted/submitted late.

Mobile Apps

Our apps for iOS and Android allow teachers, parents, and students to stay organised on-the-go.

Community Resources

Community Resources is a feature that enables all SMHW schools to share best practice and collaborate.

Not all of the ten schools who have purchased Show My Homework are using all of the applications. There have been some issues with SMHW at timetable change. This seems to be to do with compatibility issues with SEEMIS. It has been reported that this takes a number of weeks to resolve meaning that the entire virtual homework solution is unusable. This is not an issue when using Glow.