



Cyflwyniad

Mae'r defnydd o dechnoleg gwybodaeth a chyfathrebu yn rhan annatod o'r cwricwlwm cenedlaethol ac yn sgil allweddol ar gyfer bywyd bob dydd. Ymhlith peth o'r offer sy'n cael eu defnyddio i gael gafael ar, trefnu, cadw, trin, dehongli cyfathrebu a chyflwyno gwybodaeth mae camerâu digidol a fideo,. Yn Ysgol Gymraeg Melin Gruffydd, rydym yn cydnabod fod gan ddisgyblion yr hawl i gael meddalwedd a chaledwedd o ansawdd da a dull strwythuredig a blaengar tuag at ddysgu'r sgiliau fydd eu hangen arnyn nhw i'w defnyddio'n effeithiol. Nod y polisi hwn yw datgan sut mae'r ysgol yn bwriadu gwneud y ddarpariaeth yma..

Nodau

Nodau'r ysgol yw:

- Cynnig cwricwlwm perthnasol, heriol y gellir ei fwynhau ar gyfer TGCh a chyfrifiadura ar gyfer pob disgybl.
- Diwallu gofynion astudiaethau rhaglenni'r cwricwlwm cenedlaethol ar gyfer TGCh a chyfrifiadura.
- Defnyddio TGCh a chyfrifiadura fel offeryn i wella dysgu drwy'r cwricwlwm cyfan.
- Ymateb i ddatblygiadau newydd mewn technoleg.
- Rhoi hyder i ddisgyblion a'r gallu i ddefnyddio TGCh a chyfrifiadura drwy gydol eu bywyd.
- Gwella dysgu mewn meysydd eraill y cwricwlwm gan ddefnyddio TGCh a chyfrifiadura.
- Datblygu dealltwriaeth o sut mae defnyddio TGCh a chyfrifiadura'n ddiogel ac yn gyfrifol.

Nod cyfrifiadura yn y cwricwlwm cenedlaethol yw sicrhau fod disgyblion:

- Yn gallu deall a rhoi egwyddorion sylfaenol gwyddor cyfrifiadura ar waith, gan gynnwys rhesymeg, algorithmau, cynrychiolaeth data a chyfathrebu
- Yn gallu dadansoddi problemau yn nhermau cyfrifiannu ac wedi a bod ganddyn nhw brofiad ymarferol ailadroddus o ysgrifennu rhaglennu cyfrifiadurol er mwyn datrys problemau o'r fath.
- Yn gallu gwerthuso a rhoi technoleg gwybodaeth ar waith, gan gynnwys technolegau newydd neu anghyfarwydd, yn ddadansoddol er mwyn datrys problemau.
- Yn ddefnyddwyr cyfrifol, cymwys, hyderus a chreadigol o wybodaeth a thechnoleg cyfathrebu.

Rhesymwaith

Mae'r ysgol yn credu bod TGCh a chyfrifiannu:

- Yn rhoi mynediad unionsyth i ddisgyblion at ffynhonnell gyfoethog o ddeunyddiau.
- Yn gallu cyflwyno gwybodaeth mewn ffyrdd newydd a all helpu disgyblion ddeall sut mae cyrchu a'i ddefnyddio'n fwy parod..
- Yn gallu ysgogi a thanio brwdfrydedd disgyblion.
- Yn gallu helpu disgyblion i ganolbwyntio.
- Yn cynnig potensial ar gyfer gwaith grŵp effeithiol.
- Yn meddu ar yr hyblygrwydd i ddiwallu anghenion unigol a galluoedd pob disgybl.

Amcanion

Cyfnod Sylfaen - Meithrin a Derbyn

Mae'n bwysig i roi profiad eang o TGCh sydd yn seiliedig ar chwarae i blant yn y cyfnod Sylfaen mewn ystod o gyd-destunau, gan gynnwys chwarae yn yr awyr agored. Dyw TGCh ddim yn ymwneud â chyfrifiaduron yn unig. Dylai senarios TGCh, sydd yn seiliedig ar brofiad yn y byd iawn fod yn rhan o amgylchedd ddysgu'r Blynyddoedd Cynnar, fel y gwelir mewn chwarae rhan. Mae plant yn magu hyder, rheolaeth a sgiliau iaith drwy gyfleoedd i 'baentio' ar y bwrdd gwyn neu yrru Tegan dan reolaeth o bell. Mae chwilota yn yr awyr agored yn agwedd bwysig o hyn, gyda chefnogaeth teganau TGCh fel ditectyddion metel, goleuadau traffig y gellir eu rheoli a setiau radio symud a siarad. Gall dyfeisiau recordio gefnogi plant i ddatblygu eu sgiliau cyfathrebu.

Erbyn diwedd y Cyfnod Sylfaen, dylid dysgu disgyblion sut i:

- Ddeall beth yw algorithmau, sut maen nhw'n cael eu rhoi ar waith fel rhaglenni ar ddyfeisiau digidol, a bod rhaglenni yn gweithredu drwy ddilyn cyfres o gyfarwyddiadau
- Ysgrifennu a phrofi rhaglenni syml
- Defnyddio rhesymu rhesymegol er mwyn darogan a chyfrifo ymddygiad rhaglenni syml
- Trefnu, storio, trin ac adfer data mewn ystod o ffurfiau digidol
- Cyfathrebu'n ddiogel ac yn barchus ar-lein, gan gadw gwybodaeth bersonol yn breifat, ac adnabod defnyddiau cyffredin o dechnoleg gwybodaeth tu hwnt i'r ysgol.

Erbyn diwedd Cyfnod Allweddol 2, dylai disgyblion fod wedi dysgu:

- Dylunio ac ysgrifennu rhaglenni sydd yn cyflawni nodau penodol, gan gynnwys rheoli neu simiwleiddio systemau corfforol; datrys problemau drwy eu dadelfennu i rannau llai
- Defnyddio dilyniant, dethol, ac ailadrodd mewn rhaglenni; gweithio gydag

- amrywiolion a ffurfiau amrywiol o fewnbwn ac allbwn; cynhyrchu mewnbynnau priodol ac allbynnau a ragfynegwyd er mwyn profi rhaglenni
- Defnyddio rhesymu rhesymegol i egluro sut name algorithm syml yn gweithio ac i ddod o hyd i a chywiro gwallau mewn algorithmau a rhaglenni
 - Deall rhwydweithiau cyfrifiadur gan gynnwys y rhyngwyd; sut allan nhw gynnig gwasanaethau lluosog, fel y we fyd eang; a'r cyfleoedd maen nhw'n cynnig ar gyfer cyfathrebu a chydweithio
 - Disgrifio sut mae peiriannau chwilio'r rhyngwyd yn canfod a chadw data; defnyddio peiriannau chwilio'n effeithiol; bod yn ddeallus ynglŷn â gwerthuso cynnwys digidol; parchu unigolion ac eiddo deallusol; defnyddio technoleg yn gyfrifol ac yn ddiogel
 - Dewis, defnyddio a chyfuno amrywiaeth o feddalwedd (gan gynnwys gwasanaethau rhyngwyd) ar ystod o wasanaethau digidol er mwyn cyflawni nodau a roddwyd, gan gynnwys casglu, dadansoddi, gwerthuso a chyflwyno data a gwybodaeth.

Adnoddau a mynediad

Mae'r ysgol yn cydnabod yr angen i gadw, diweddarau a datblygu ei adnoddau'n barhaus ac i wneud cynnydd tuag at system gyson, gytûn drwy fuddsoddi mewn adnoddau fydd, i bob diben, yn cyflenwi llinynnau'r cwricwlwm cenedlaethol ac yn cefnogi'r defnydd o TGCh a chyfrifiannu ar draws yr ysgol. Mae gofyn ar athrawon i roi gwybod i'r ysgol am unrhyw ddiffygion cyn gynted ag y byddan nhw'n sylwi amyn nhw. Mae gan yr ysgol galedwedd wedi ei seilio yn yr ystafell ac ystafell TGCh.

Cafodd isadeiledd rhwydwaith TGCh ac offer cyfrifiannu ei leoli:

- Fel bod gan bob ystafell ddsbarth o'r Meithrin hyd at Flwyddyn 6 gyfrifiadur wedi'i gysylltu i rwydwaith yr ysgol a bwrdd gwyn rhyngweithiol gyda sain, DVD a chyfleusterau fideo.
- Fel bod yna ystafell TGCh gyda chyfres o gyfrifiaduron Mac
- Fod yna droliau niferus yn yr ysgol gyda set ddsbarth o iPads a Chromebooks a chanddynt fynediad at y rhyngwyd ar gael i'w ddefnyddio yn yr ystafelloedd ddsbarth.
- Fel bod gan bob ddsbarth o Flwyddyn 1 - Blwyddyn 6 gyfnod penodol ar gyfer dysgu sgiliau TGCh a chyfrifiannu ar gyfer gwaith ar draws y cwricwlwm. Mae'r iPads ar gael i'w defnyddio drwy gydol y diwrnod ysgol fel rhan o wersi TGCh a chyfrifiannu ac ar gyfer eu defnyddio ar draws y cwricwlwm.
- Fel y gall disgyblion ddefnyddio TGCh a chyfrifiannu'n annibynnol, mewn parau, wrth ochr Cynorthwydd Dysgu neu mewn grŵp gydag athro.
- Mae gan yr ysgol dechnegydd TGCh a chyfrifiannu sy'n ymweld ac yn cynorthwyo'r ysgol yn rheolaidd
- Bydd llywodraethwr yn cael ei wahodd i gymryd diddordeb penodol mewn TGCh a chyfrifiannu yn yr ysgol.

Cynllunio

Wrth i'r ysgol ddatblygu ei adnoddau ac arbenigedd i gyflenwi'r cwricwlwm TGCh a chyfrifiannu, caiff modiwlau eu cynllunio yn unol â'r cwricwlwm cenedlaethol a bydd

yn caniatáu ar gyfer gwneud cynnydd clir. Caiff modiwlau eu cynllunio i alluogi disgyblion i gyflawni eu nodau dynodedig. Caiff cynnydd disgyblion tuag at y nodau hyn eu cofnodi gan athrawon fel rhan o'u system cofnodi dosbarth. Bydd gan leiafrif o blant anghenion dysgu ac addysgu penodol sydd yn mynd tu hwnt i'r ddarpariaeth ar gyfer yr ystod oedran honno ac fe allai hynny greu rhwystrau i ddysgu os na gyfeirir ato. Gallai hynny gynnwys plant Mwy Abl a Thalentog (MAT) neu'r sawl sydd ag Anghenion Dysgu Ychwanegol (ADY). Rhaid i athrawon gymryd y gofynion hyn i ystyriaeth a chynllunio, lle fod angen, i gefnogi unigolion neu grwpiau o ddisgyblion i'w galluogi nhw i gymryd rhan yn effeithiol yn y cwricwlwm a'r gweithgareddau asesu. Yn ystod unrhyw weithgareddau dysgu, dylai athrawon gadw mewn cof y gallai trefniadau arbennig gael eu gwneud i fod ar gael i gefnogi disgyblion unigol. Mae hyn yn unol â pholisi cynhwysiad yr ysgol. Dylid adnabod y plant yma a'u trafod mewn cyfarfodydd cynnydd disgyblion er mwyn sicrhau bod darpariaethau priodol neu ymyraethau cymorth addas yn cael eu cyflwyno a'u gweithredu.

Asesiad a chadw cofnod (gweler hefyd polisi asesu)

Bydd athrawon yn asesu gallu yn rheolaidd drwy arsylwadau ac wrth edrych ar waith a gafodd ei gwblhau. Mae'r amcanion allweddol sydd i'w hasesu yn cael eu cymryd o'r cwricwlwm cenedlaethol er mwyn asesu sgiliau TGCh a chyfrifiannu allweddol bob tymor. Mae asesu gwaith TGCh a chyfrifiannu yn rhan annatod o ddysgu ac addysgu ac yn a ganolog i ymarfer da. Dylai fod yn seiliedig ar broses - gan adolygu'r ffordd mae technegau a sgiliau yn cael eu rhoi ar waith yn bwrpasol gan ddisgyblion i arddangos eu dealltwriaeth o gysyniadau TGCh a chyfrifiannu. Gan fod asesiad yn rhan o'r broses ddysgu, mae'n hanfodol fod disgyblion yn ymwneud â hwn yn agos.

Gellir rhannu asesiad i mewn i'r cydrannau canlynol;

- Bydd asesiadau ffurfiannol yn cael eu cynnal yn ystod ac yn dilyn tasgau a gweithgareddau byr sydd wedi eu ffocysu. Maent yn cynnig cyfle i ddisgyblion a staff i fyfyrir ar eu dysgu yng nghyd-destun y meini prawf llwyddiant a gytunwyd. Mae hyn yn bwydo mewn i gynllunio ar gyfer y wers neu weithgaredd nesaf.
- Dylai asesiadau crynodol adolygu gallu disgyblion a rhoi lefel ffit orau. Mae'r defnydd o dasgau penagored annibynnol, yn cynnig cyfleoedd i ddisgyblion arddangos gallu mewn perthynas â gwaith y tymor. Dylai fod yna gyfle ar gyfer adolygiad disgyblion ac adnabod y camau nesaf. Dylai asesiad crynodol gael ei gofnodi ar gyfer pob disgybl - gan ddangos p'un a yw'r disgyblion wedi bodloni, rhagori ar neu heb gyflawni'r nodau dysgu.

Rydym yn asesu gwaith y plant yn TGCh a chyfrifiannu drwy wneud dyfarniadau anffurfiol wrth i ni arsylwi ar y plant yn ystod y gwersi. Byddwn yn marcio pob darn o waith yn erbyn nod y wers - gan ddefnyddio codau marcio a amlinellwyd yn ein polisi Adborth a Marcio. Unwaith bod y plant yn cwblhau uned o waith, byddwn yn cynnal dyfarniad cryno o'r gwaith ar gyfer pob disgybl gan nodi a ydynt eto i gyflawni, wedi cyflawni neu wedi rhagori ar ddisgwyliadau'r uned. Cofnodwn y canlyniadau yn ein ffeiliau asesu a defnyddiwn y rhain er mwyn cynllunio gwaith yn y dyfodol, er mwyn rhoi sail ar gyfer asesu cynnydd y plentyn ac i basio'r wybodaeth ymlaen i'r athro nesaf ar ddiwedd y flwyddyn. Caiff gwaith TGCh a chyfrifiannu ei gadw ar rwydwaith yr ysgol. Gellir argraffu a ffeilio gwaith arall o fewn y pwnc y cafodd y gwaith ei osod.

Monitro a gwerthuso

Mae'r arweinydd pwnc yn gyfrifol am fonitro safon gwaith y plant ac ansawdd y dysgu yn unol â chylch monitro'r ysgol. Fe all hyn fod drwy arsylwi ar wersi, mynd drwy lyfrau ac edrych ar ddata arall ar y pwnc. Yr arweinydd pwnc sydd hefyd yn gyfrifol am gefnogi cydweithwyr wrth addysgu cyfrifiannu, o fod yn hyddysg ynglŷn â datblygiadau cyfredol yn y maes, ac am roi arweiniad strategol a chyfeiriad clir ynglŷn â'r pwnc yn yr ysgol. Rydym yn pennu amser arbennig ar gyfer y dasg hanfodol o adolygu samplau o waith y plant ac ar gyfer ymweld â dosbarthiadau er mwyn arsylwi ar addysgu yn y pwnc.

Disgyblion a chanddynt anghenion addysgol ychwanegol (gweler hefyd ein polisi ADY)

Credwn fod gan bob plentyn yr hawl i gael mynediad at TGCh a chyfrifiannu er mwyn sicrhau fod plant sydd ag anghenion addysgol arbennig yn cyflawni hyd at eithaf eu gallu, gall fod angen addasu'r modd caiff y cwricwlwm TGCh a chyfrifiannu ei gyflenwi ar gyfer rhai disgyblion. Rydym yn dysgu TGCh a chyfrifiannu i bobl plentyn, beth bynnag eu gallu. Mae TGCh a chyfrifiannu yn ffurfio rhan o'r cwricwlwm cenedlaethol er mwyn cynnig addysg eang a chytbwys i bob plentyn. Drwy ddysgu TGCh a chyfrifiannu, rydym yn cynnig cyfleoedd dysgu sy'n galluogi pob plentyn i wneud cynnydd. Fe wnawn hyn drwy osod heriau dysgu priodol a thrwy ymateb i anghenion gwahanol bob plentyn. Pan yn briodol, gellir defnyddio TGCh a chyfrifiannu i helpu plant ADY ar sail un i un pan fydd plant yn cael cymorth ychwanegol. Yn ychwanegol i hynny, fel rhan o'n hymagwedd gyfeillgar i ddyslecsia ar gyfer dysgu ac addysgu, byddwn yn defnyddio adnoddau wedi'u haddasu lle bynnag yw'n bosibl, fel amserlen weledol, cefndiroedd ac argraffiadau sgrin o wahanol liw.

Cyfleoedd cyfartal (gweler hefyd polisi cyfleoedd cyfartal)

Bydd Ysgol Gymraeg Melin Gruffydd yn sicrhau fod pob plentyn yn cael yr un cyfleoedd dysgu waeth bynnag eu dosbarth cymdeithasol, rhywedd, diwylliant, hil, anabledd neu anawsterau dysgu. O ganlyniad, gobeithiwn alluogi pob plentyn i ddatblygu agweddau cadarnhaol tuag at eraill. Mae gan bob disgybl fynediad cyfartal at TGCh a chyfrifiannu ac mae pob aelod o staff yn dilyn y polisi cyfleoedd cyfartal. Bydd adnoddau ar gyfer plant ADY a Mwy abl a thalentog ar gael er mwyn cefnogi a herio fel sy'n addas.

Swyddogaeth y cydlynnydd

- Mae'r cydlynnydd TGCh yn gyfrifol am gynhyrchu cynllun datblygu TGCh a chyfrifiannu ar gyfer gweithredu'r polisi TGCh a chyfrifiannu ar draws yr ysgol.
- Cynnig help a chymorth i holl aelodau'r staff (gan gynnwys cymhorthyddion

- dysgu) yn eu haddysgu, cynllunio ac asesiad o TGCh.
- Cynnal adnoddau a chynghori staff ar y defnydd o'r deunyddiau, offer a llyfrau hyn.
 - Monitro dysgu yn y stafell ddosbarth neu gynllunio wrth ddilyn rhaglen monitro gyfredol yr ysgol.
 - Monitro gwaith TGCh y plant, gan edrych ar samplau o wahanol alluoedd.
 - Arwain hyfforddiant staff ar fentrau newydd.
 - Mynychu hyfforddiant mewn-gwasanaeth priodol a diweddarau staff gyda'r wybodaeth berthnasol a datblygiadau diweddaraf.
 - i fod â brwdfrydedd ynglŷn â TGCh ac i annog staff i rannu'r brwdfrydedd yma.
 - Diweddarau rhieni a llywodraethwyr ar weithrediad TGCh yn yr ysgol.
 - Cydlynu gyda holl aelodau staff ynglŷn â sut mae cyrraedd a gwella targedau cytûn
 - Helpu staff i ddefnyddio asesiad i oleuo cynllunio yn y dyfodol.

Swyddogaeth yr athro dosbarth

- Bydd athrawon unigol yn gyfrifol am sicrhau fod gan ddisgyblion yn eu dosbarthiadau gyfleoedd i ddysgu am TGCh a sgiliau cyfrifiannu a defnyddio TGCh a chyfrifiannu ar draws y cwricwlwm
- Cynllunio a chyflenwi gofynion y fframwaith cynradd ar gyfer TGCh.
- Yn Ysgol Gymraeg Melin Gruffydd, gosodwn ddisgwyliadau uchel ar gyfer ein disgyblion ac rydym yn cynnig cyfleoedd i bob disgybl gyflawni, gan gynnwys merched a bechgyn, disgyblion a chanddynt anghenion addysgol ychwanegol, disgyblion ag anableddau, disgyblion o bob cefndir cymdeithasol a diwylliannol. Mae'r athro dosbarth yn sicrhau llwyddiant drwy greu amgylchedd ddysgu effeithiol drwy sicrhau eu bod yn gymhellgar ac yn canolbwyntio.
- Cynnig cydraddoldeb cyfle drwy ymagweddau addysgu.
- Defnyddio dulliau asesu priodol
- Gosod targedau addas ar gyfer dysgu fel yr amlinellir yn y polisi cynwysoldeb.
- Mae swydd yr athro dosbarth yn hanfodol yn natblygiad TGCh drwy gydol yr ysgol a byddwn yn sicrhau cynnydd parhaus mewn dysgu a dealltwriaeth.
- Cadw cofnodion asesu wedi'u diweddarau

Hyfforddiant staff

- Bydd y cydlynnydd TGCh yn asesu a chyfeirio at anghenion hyfforddiant staff fel rhan o broses y cynllun datblygu blynyddol neu mewn ymateb i anghenion unigol a cheisiadau a wneir yn ystod y flwyddyn.
- Dylai athrawon unigol geisio datblygu eu sgiliau eu hunain a'u gwybodaeth yn barhaus, gan adnabod eu hanghenion eu hunain a rhoi gwybod i'r cydlynnydd.
- Caiff athrawon eu hannog i ddefnyddio TGCh a chyfrifiannu i gynhyrchu cynlluniau, adroddiadau, cyfathrebiadau ac adnoddau addysgu.

Iechyd a diogelwch (gweler polisi iechyd a diogelwch hefyd)

Mae'r ysgol yn ymwybodol o'r materion iechyd a diogelwch sydd yn ymwneud â defnydd plant o TGCh a chyfrifiannu. Caiff pob dyfais sydd wedi'i leoli a phob dyfais gludadwy yn yr ysgol ei brofi gan contractwr o'r Awdurdod Lleol, yn unol â phrotocol yr ALL bob 12 mis. Cynghorir staff i beidio dod â'u hoffer trydanol eu hunain mewn i'r ysgol ond os yw hyn yn angenrheidiol, yna dylid cynnal prawf pat ar yr offer cyn iddo gael ei ddefnyddio yn yr ysgol. Mae hyn hefyd yn gymwys ar gyfer unrhyw offer a ddaw mewn i'r ysgol gan, er enghraifft, pobl sy'n rhedeg gweithdai, gweithgareddau ayyb, a chyfrifoldeb yr aelod hwnnw o staff sy'n trefnu'r gweithdy yw hi i gynghori'r bobl hynny. Dylai pob aelod o staff wirio offer trydanol yn weledol cyn iddyn nhw ei ddefnyddio a chymryd offer a gafodd ei niweidio allan o ddefnydd. Dylid riportio unrhyw offer sydd wedi'i ddifrodi i lteach fydd yn trefnu i'w drwsio neu gael ei wared.

- Ni ddylai plant roi plygiau mew i socedi na throi socedi ymlaen.
- Dylid sicrhau bod gwifrau yn cael eu gosod yn ddiogel tu ôl yr offer
- Ni ddylid rhoi hylif ar bwys cyfrifiaduron.
- Rhaid cadw magnetau i ffwrdd o'r holl offer
- Rhaid dilyn y canllawiau diogelwch mewn perthynas â chaledwedd TGCh
- Amlinellir canllawiau e-ddiogelwch yn y polisi e-ddiogelwch

Diogelwch

- Bydd y technegydd TGCh (lteach) yn gyfrifol am ddiweddarau meddalwedd gwrth-firws yn rheolaidd.
- Bydd y defnydd a wneir o TGCh yn unol â 'pholisi defnydd derbyniol' yr ysgol. Rhaid i holl staff, gwirfoddolwyr a phlant lofnodi copi o AUP yr ysgol.
- Caiff rhieni eu gwneud yn ymwybodol o'r polisi 'Defnydd Derbyniol' ar ddechrau yn yr ysgol a hefyd ar gyfnod allweddol 2.
- Bydd pob rhiant a disgybl yn ymwybodol o reolau'r ysgol ar gyfer defnyddio TGCh a chyfrifiannu a'r rhyngwyd yn gyfrifol ac fe fyddan nhw'n deall canlyniadau unrhyw gamddefnydd.
- Caiff y rheolau cytunedig ar gyfer defnyddio TGCh a chyfrifiannu yn ddiogel a chyfrifol eu gosod a'u harddangos ymhob ardal TGCh a chyfrifiannu.

Cysylltiadau ar draws y cwricwlwm

Fel staff rydym yn ymwybodol y dylid cyflawni gallu TGCh a chyfrifiannu drwy bynciau craidd a sylfaen. Lle yw'n briodol, dylai TGCh a chyfrifiannu gael eu hymgorffori mewn i gynlluniau gwaith ar gyfer pob pwnc. Dylai TGCh a chyfrifiannu gael eu defnyddio i gefnogi dysgu mewn pynciau eraill yn ogystal â datblygu sgiliau TGCh chyfrifiannu.

Ymwneud y rhieni

Anogir rhieni i gefnogi gweithredu TGCh a chyfrifiannu lle bynnag bosibl drwy annog

y defnydd o sgiliau TGCh a chyfrifiannu yn ystod y tasgau dysgu adref a thrwy lwyfannau dysgu gwefan yr ysgol a chyfryngau cymdeithasol. Fe fyddan nhw'n cael eu gwneud yn ymwybodol o e-ddiogelwch ac yn cael eu hannog i hyrwyddo hyn adref.

I'w adolygu bob 3 mlynedd.



Introduction

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Ysgol Gymraeg Melin Gruffydd, we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

Aims

The school's aims are to:

- Provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils.
- Meet the requirements of the national curriculum programmes of study for ICT and computing.
- Use ICT and computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use ICT and computing throughout their later life.
- To enhance learning in other areas of the curriculum using ICT and computing.
- To develop an understanding of how to use ICT and computing safely and responsibly.

Computing in the national curriculum aims to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation and communication
- Can analyse problems in computational terms and have repeated practical experience of writing computer programs in order to solve such problems
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Are responsible, competent, confident and creative users of information and communication technology.

Rationale

The school believes that ICT and computing:

- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand access and use it more readily.
- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Objectives

Foundation Phase - Nursery and Reception

It is important in the foundation stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. ICT is not just about computers. Early years learning environments should feature ICT scenarios based on experience in the real world, such as in role-play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or drive a remote-controlled toy. Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills.

By the end of the Foundation Phase, pupils should be taught to:

- understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions
- write and test simple programs
- use logical reasoning to predict and computing the behaviour of simple programs
- organise, store, manipulate and retrieve data in a range of digital formats
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of Key Stage 2 pupils should be taught to:

- design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs
- use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration
- describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Resources and access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of ICT and computing across the school. Teachers are required to inform the school office of any faults as soon as they are noticed. The school has classroom-based hardware and an ICT suite.

ICT and computing network infrastructure and equipment have been sited so that:

- Every classroom from Nursery to Y6 has a computer connected to the school network and an interactive whiteboard with sound, DVD and video facilities.
- There is an ICT suite of Mac computers
- There are numerous trollies in school containing a class set of iPads and Chromebooks with internet access available to use in classrooms.
- Each class from Y1 – Y6 has an allocated slot for the teaching of specific ICT and computing skills and for cross-curricular work. The iPads are available for use throughout the school day as part of ICT and computing lessons and for cross-curricular use.
- Pupils may use ICT and computing independently, in pairs, alongside a TA or in a group with a teacher.
- The school has an ICT and computing technician who visits and supports the school regularly
- A governor will be invited to take a particular interest in ICT and computing in the school.

Planning

As the school develops its resources and expertise to deliver the ICT and computing curriculum, modules will be planned in line with the national curriculum and will allow for clear progression. Modules will be designed to enable pupils to achieve stated objectives. Pupil progress towards these objectives will be recorded by teachers as part of their class recording system. A minority of children will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include More Able and Talented (MAT) children or those with ALN. Teachers must take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum and assessment activities. During any teaching activities, teachers should bear in mind that special arrangements could be made available to support individual pupils. This is in line with the school inclusion policy. These children should be identified and discussed at pupil progress meetings to ensure appropriate provisions or support interventions are put into place.

Assessment and record keeping (also see assessment policy)

Teachers regularly assess capability through observations and looking at completed work. Key objectives to be assessed are taken from the national curriculum to assess key ICT and computing skills each term. Assessing ICT and computing work is an integral part of teaching and learning and central to good practice. It should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts of ICT and computing. As assessment is part of the learning process it is essential that pupils are closely involved.

Assessment can be broken down into;

- Formative assessments are carried out during and following short focused tasks and activities. They provide pupils and teaching staff with the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.
- Summative assessment should review pupils' capability and provide a best fit level. The use of independent open-ended tasks, provide opportunities for pupils to demonstrate capability in relation to the term's work. There should be an opportunity for pupil review and identification of the next steps. Summative assessment should be recorded for all pupils – showing whether the pupils have met, exceeded or not achieved the learning objectives.

We assess the children's work in ICT and computing by making informal judgements as we observe the children during lessons. We mark each piece of work against the lesson objective- using the marking codes set out in our Feedback and

Marking Policy. Once the children complete a unit of work, we make a summary judgement of the work for each pupil as to whether they have yet to achieve, achieved or exceeded the expectations of the unit. We record the results in our assessment files and we use these to plan future work, to provide the basis for assessing the progress of the child and to pass the information on to the next teacher at the end of the year. ICT and computing work is saved on the school network. Other work may be printed and filed within the subject from which the task was set.

Monitoring and evaluation

The subject leader is responsible for monitoring the standard of the children's work and the quality of teaching in line with the schools monitoring cycle. This may be through lesson observations, book trawl or looking at other data for the subject. The subject leader is also responsible for supporting colleagues in the teaching of computing, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school. We allocate special time for the vital task of reviewing samples of children's work and for visiting classes to observe teaching in the subject.

Pupils with special educational needs (see also ALN policy)

We believe that all children have the right to access ICT and computing. In order to ensure that children with special educational needs achieve to the best of their ability, it may be necessary to adapt the delivery of the ICT and computing curriculum for some pupils. We teach ICT and computing to all children, whatever their ability. ICT and computing form part of the national curriculum to provide a broad and balanced education for all children. Through the teaching of ICT and computing, we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and by responding to each child's different needs. Where appropriate ICT and computing can be used to support SEN children on a one to one basis where children receive additional support. Additionally, as part of our dyslexia friendly approach to teaching and learning, we will use adapted resources wherever possible such as visual timetables, different coloured backgrounds and screen printouts.

Equal opportunities (see also equal opportunities policy)

Ysgol Gymraeg Melin Gruffydd will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, disability or learning difficulties. As a result, we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to ICT and computing and all staff members follow the equal opportunities policy. Resources for ALN children and gifted & talented will be made available to support and challenge appropriately.

The role of the co-ordinator

- The ICT coordinator is responsible for producing an ICT and computing development plan and for the implementation of the ICT and computing policy across the school.
- To offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of ICT.
- To maintain resources and advise staff on the use of materials, equipment and books.
- To monitor classroom teaching or planning following the schools rolling programme of monitoring.
- To monitor the children's ICT work, looking at samples of different abilities.
- To lead staff training on new initiatives.
- To attend appropriate in-service training and keep staff up to date with relevant information and developments.
- To have enthusiasm for ICT and encourage staff to share this enthusiasm.
- To keep parents and governors informed on the implementation of ICT in the school.
- To liaise with all members of staff on how to reach and improve on agreed targets
- To help staff to use assessment to inform future planning.

The role of the class teacher

- Individual teachers will be responsible for ensuring that pupils in their classes have opportunities for learning ICT and computing skills and using ICT and computing across the curriculum
- To plan and deliver the requirements of the primary framework for ICT.
- At Ysgol Gymraeg Melin Gruffydd, we set high expectations for our pupils and provide opportunities for all pupils to achieve, including girls and boys, pupils with additional learning needs, pupils with disabilities, pupils from all social and cultural backgrounds. The class teacher ensures success by creating effective learning environments securing their motivation and concentration
- Providing equality of opportunity through teaching approaches.
- Using appropriate assessment approaches
- Setting suitable targets for learning as outlined in the inclusion policy.
- The class teacher's role is a vital role in the development of ICT throughout the school and will ensure continued progression in learning and understanding.
- To keep up to date assessment records

Staff training

- The ICT coordinator will assess and address staff training needs as part of the annual development plan process or in response to individual needs and requests throughout the year.
- Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs and notify the coordinator.
- Teachers will be encouraged to use ICT and computing to produce plans, reports, communications and teaching resources.

Health and safety (see also health and safety policy)

The school is aware of the health and safety issues involved in children's use of ICT and computing. All fixed electrical appliances and all portable electrical equipment in school are tested by a LA contractor in line with LA protocol every 12 months. It is advised that staff should not bring their own electrical equipment into school but if this is necessary, then the equipment must be pat tested before being used in school. This also applies to any equipment brought in to school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc to advise those people. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to Iteach who will arrange for repair or disposal.

- Children should not put plugs into sockets or switch the sockets on.
- Trailing leads should be made safe behind the equipment
- Liquids must not be taken near the computers
- Magnets must be kept away from all equipment
- Safety guidelines in relation to ICT hardware must be followed
- e-safety guidelines will be set out in the e-safety policy

Security

- The ICT technician (Iteach) will be responsible for regularly updating anti-virus software.
- Use of ICT and computing will be in line with the school's 'acceptable use policy'. All staff, volunteers and children must sign a copy of the schools AUP
- Parents will be made aware of the 'acceptable use policy' at school entry and KS2.
- All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequence of any misuse.
- The agreed rules for safe and responsible use of ICT and computing and the internet will be displayed in all ICT and computing areas.

Cross curricular links

As a staff we are all aware that ICT and computing capability should be achieved through core and foundation subjects. Where appropriate, ICT and computing should be incorporated into schemes of work for all subjects. ICT and computing should be used to support learning in other subjects as well as develop ICT and computing skills.

Parental involvement

Parents are encouraged to support the implementation of ICT and computing where possible by encouraging use of ICT and computing skills at home during home-learning tasks and through the school website learning platforms and social media. They will be made aware of e-safety and encouraged to promote this at home.

To be reviewed every 3 years.

Chair of governors:



Date: 10 May 2021