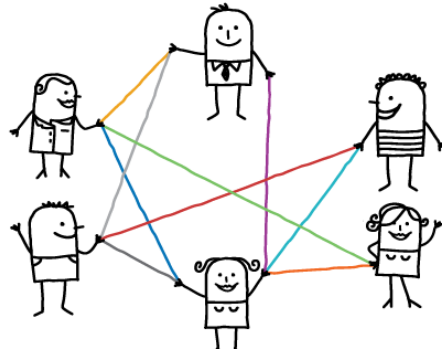


## Essential Student Skills: Collaborative learning

### Introduction

The University of the Highlands & Islands includes several online and blended learning courses which employ a range of innovative educational approaches (e.g. Health, History, Psychology and Sustainable Development).

The UHI Geography programme employs a premier learning and teaching approach. It is quite different from the traditional, passive, in-person lecture hall (broadcast) based teaching approach ('the sage-on-the-stage'). Instead it is a form of participatory education centred in communities of inquiry as shown in the diagram opposite.



Group of people connected by colour lines - [Shutterstock](#)

### Objectives

By the time you have completed this section of the induction you should:

- Appreciate how collaborative learning can help to develop key skills
- Understand the benefits and challenges of working in a group

### Why work in groups?

*“Coming together is a beginning. Keeping together is progress.  
Working together is success.”*

(‘Henry Ford’, no date)

All learners have had unique experiences, experiences that have helped shape who they are and how they think. Sharing those with others can lead to the creation of new knowledge.

Participation in group work can enhance motivation and positively affect levels of attainment and skills development on course completion (Fisher, Thompson, and Silverberg, 2004-5; Brigman and Webb, 2007; Razmerita, 2020).



*‘Group work’* by Bionic Teaching from Flickr, used under an [Attribution-NonCommercial 2.0 Generic license](#)

It is generally accepted that well-structured group activities or projects have the ability to stimulate and promote the social and intellectual skills that employers are increasingly asking for and expect.

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Based on a meta-analysis of a variety of surveys, the University of Kent have compiled a list of the [Top 10 Skills employers want](#). It is easy to see from this list that many of these skills can be practiced and perfected through group work. If you look further down the list you will also see a table of 'other important skills'. Note that many of these are also the product of working in groups and teams.

## QAA Enhancement Framework

UHI is committed to helping students develop 'graduate attributes for the 21st Century' ([QAA Enhancement Framework](#)). These attributes include the following abilities:

- To recognise what is required in diverse situations;
- To identify and employ IT and web-based tools;
- To recognise and respond appropriately to the strengths and weaknesses of other, and;
- To work collaboratively.

Group work activities actively develop these real-world skills.

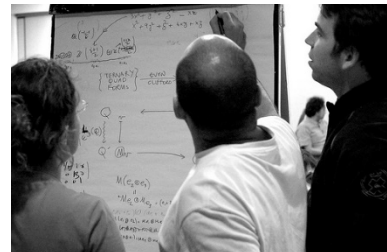
## What the research says

**“The ability to collaborate is often described as a quintessential 21st century skill”**

(Sobko *et al.*, 2019: 37)

Drouin (2008) made the connection between social presence and a 'sense of community' within groups of learners, and student satisfaction and retention. Sellitto, (2011) links the benefits of group work to three distinct types of student capabilities:

- experiential
- personal, and
- skills related.



*'Working on the easel'* by Christopher Holden from Flickr, used under [Creative Commons ShareAlike 2.0 Generic license](#)

Some point to the fact that online group work has the potential to enhance digital literacy and time management skills (Hurst), and "may more closely mimic how diverse teams work together within and between professional organizations and hence may serve as a useful experience to prepare students for modern teamwork after graduation" (2020, p. 2706).

In this model the tutor's role is that of a facilitator 'scaffolding' and directing studies ('the-guide-on-the-side') and problem-solving activities. As part of the learning process students will seek out information themselves, reflect on their findings and then engage in meaningful discussions and debate with their learning group

## Essential Student Skills: Collaborative learning

(community of inquiry) and tutors, from whom they will bounce ideas and construct knowledge from the resulting process.

## The challenges of working in groups

“It is also important to recognize that ‘placing learners together does not guarantee productive collaboration’”

(Chen *et al.*, 2018; as cited in Sobko *et al.*, 2019, p. 39)

There are many adages and quotes such as the one previously from Henry Ford that bestow the virtues of group/team work however it is not always plain sailing and working in groups does have its challenges for both the participants and those doing the organising.

As an example, some students do not do so well competing for ‘air-time’ in a live group face-to-face or videoconference tutorial.



‘UB MWEE Team Building Buffalo NY (15)’ by Michael Cardus from Flickr, used under an [Attribution 2.0 Generic license](#)

However, this can be overcome by using complementary asynchronous forums to give these students time to research and compose contributions at a pace that suits them. They can take time to reflect on the views of others and in doing so enhance their input to their modules. This strategy results in the widening of student participation and is more inclusive for less outgoing students who possess more reflective learning styles (Biesenbach-Lucas, 2003).

## Challenges and Strategies

Can you think of some of the challenges faced by those working in groups/teams and some strategies to combat them?

### Answer

The following page from a web site created by Carnegie Mellon University summarises [several challenges associated with group work](#) but helpfully suggests how they can be addressed.

## Benefits of working in groups

Ultimately, the social constructivist approach enables learners to draw upon the collective knowledge of the group and so complements and enhances that of each individual. During problem-solving activities, as a group you will construct knowledge

## Essential Student Skills: Collaborative learning

and develop understanding together and form perspectives that will inform your assessed work.

A supportive (rather than competitive) learning environment based around reflection and inclusion is more suited to maximising learning, and female students, in particular, have been found to learn most effectively in such environments

(Rovai, 2002; Paulus, 2006).

Multiple research studies (Ho and Swan, 2007; Palmer *et al.*, 2008; Shelton *et al.*, 2017; Thurber and Trautvetter, 2020; Cavatino *et al.*, 2021) have identified a direct correlation between those students most active in collaborating with their peers with those students achieving most learning outcomes and highest final module grades.

**Participation and reflection** are therefore at the centre of this learning and teaching approach as you progressively develop responsibility for your own learning. This is a student-centred approach to studying and this approach is at the heart of the learning & teaching techniques promoted by UHI.

### Benefits of working in groups/teams

Can you think of some of the benefits of working in groups/teams?

*Answer*

The following page from a web site created by Carnegie Mellon University summarises several compelling benefits of taking part in group work.

[Carnegie Mellon University summary of benefits](#)

### How are teams created?

Tutors work initially to help facilitate a team of motivated learners. They will let you know what is expected of you, what you are being asked to do it and what support you should expect in order to complete the task.

Each team will then be encouraged to develop a 'community of practice' or 'community of inquiry' within their respective peer group. A deep form of understanding and learning is possible from this reflective and participatory approach if students engage to the level required.

Developing a sense that **'you are all in it together'** or camaraderie (Brown, 2001), is important within blended learning



'Four heads are better than one' by Nic McPhee from Flickr, used under [Creative Commons ShareAlike 2.0 Generic license](#)

## Essential Student Skills: Collaborative learning

approaches and this requires regular communications from all participants. This camaraderie, once established, is what will ‘cement’ the success of the group. This need for the development of a ‘sense of community’ is recognised by many researchers in the field (Rovai, 2000; Salmon, 2003; Wickersham and McGee, 2008; Gerber *et al.*, 2008; Skinner, 2009).

The mix of both on-site tutor-based learning and teaching activities, (the scaffolding for constructing knowledge), often in groups or teams (e.g. dyads and triads) complemented with online activities, will give individuals in these socialised learning communities the greatest chance of completing their studies and maximising their academic achievement.

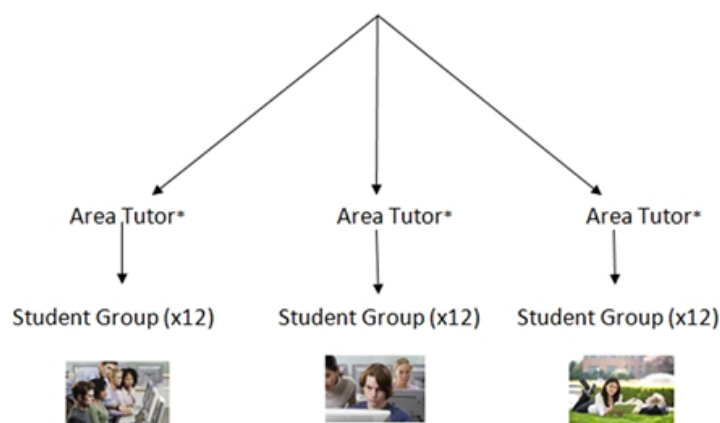
## Case study: Teams in UHI Geography degree

Collaborative learning forms a part of a great many courses at UHI because it is a very effective way to learn and can lead to the development of highly desirable employability skills. The following information relating to the UHI Geography programme is just one example of how this might be done.

### Introduction

The UHI Geography learning and teaching model is based around content and assessment to be delivered and based primarily around group interaction in a socialised learning environment. The approach will adhere to the key lessons established by educational researchers over the last 10-15 years across the globe. This social constructivist approach to teaching and learning is at the leading edge of international online and blended learning strategies and can subsequently be adopted by future UHI degrees seeking to extend this model.

### Delivery model



\* One single tutor may serve multiple sites.

*Delivery model*



## Essential Student Skills: Collaborative learning

### Activities

The Geography programme is designed to be rich in transferable skills or employability skills. Students are taught in small groups of up to 12-15 learners and are directed to participate in study groups in a socialised learning environment in which the tutor onsite will play a key facilitating role.

Their participation is counted towards their final module marks and as part of their study they are involved in a range of stimulating and challenging group projects which can include:

- role play
- group poster development and display
- group Wiki development
- group reports and presentations

This peer collaboration built-in to the core activities of each module is designed to engage students in developing key team building skills of benefit to the workplace. Such experience is increasingly sought after by prospective employers and is a key employability skill.

### Is group work assessed?

Group work can be assessed, and often is. Knowing that there are marks at stake can positively affect people's motivation to participate:

**“Assessment makes a conspicuous impact on online collaborative study”**

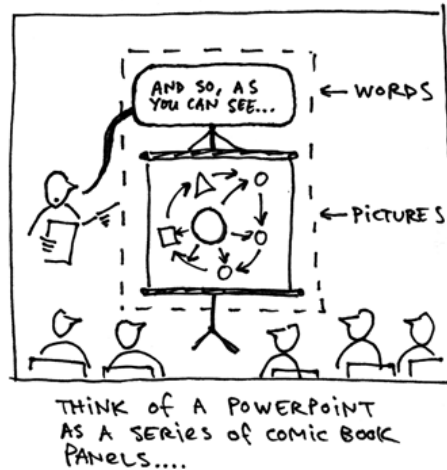
(MacDonald, 2003)

Interestingly, there is also evidence that a lack of grading can be a positive factor in the success of group work (Brindley, Blaschke, and Walti, 2008).

### Examples at UHI:

As seen on the previous page, participation in group work counts towards final module marks in the UHI Geography programme.

Group work is also assessed in the BA Child and Youth Studies (Hons) programme, for example in the form of inter-professional group case studies, group evaluation of initiatives and in group discussions and peer review.



*[‘PowerPoint as a comic’](#) by Austin Kleon from Flickr, used under an [Attribution-NonCommercial-NoDerivs 2.0 Generic license](#)*

## Essential Student Skills: Collaborative learning

Some group work leads to individual marks (different people in the group receive different marks) while other forms lead to group marks (where everyone in the group receives the same mark).

If the group work in your unit or module is assessed, make sure you read the details of the assessment carefully, make use of the wide variety of technologies available to you at UHI and be prepared to work at being a team player. If you do, you will be developing a broad range of highly sought-after skills\*:

communication, co-operation, collaboration, co-ordination, leadership, and reflection to name but a few.



[Pexels](#)

### **\*Sought-after skills:**

UHI's graduate attributes brings together a set of skills that you will develop as a student at UHI – these include communication and interpersonal skills

## References

Biesenbach-Lucas, S. (2003) 'Asynchronous Discussion Groups in Teacher-Training Classes: Perceptions of Native and Non-Native Students', *Journal of Asynchronous Learning Networks*, 7(3), pp. 24-46.

Brigman, G. and Webb, L. (2007) 'Student success skills: Impacting achievement through large and small group work', *Group dynamics, theory research and practice*, 11(4), pp. 283-292.

Brindley, J., Blaschke., L., & Walti, C. (2008) 'Creating effective collaborative groups in an online environment'. Unpublished paper presented at the 5th EDEN Research Workshop in Paris, Oct 20 – 22, 2008.

Brown, R.E. (2001) 'The process of community-building in distance learning classes', *Journal of Asynchronous Learning Networks*, 5(2), pp. 18-35.

Cavinato A. G., Hunter R. A., Ott L. S. and Robinson J.K. (2021) 'Promoting student interaction, engagement, and success in an online environment', *Analytical and bioanalytical chemistry*, pp.1513-1520. Available at: <https://doi.org/10.1007/s00216-021-03178-x> (Accessed 22 April 2022).

## Essential Student Skills: Collaborative learning

Drouin, M.A. (2008) 'The Relationship between Students' Perceived Sense of Community and Satisfaction, Achievement, and Retention in an Online Course', *Quarterly Review of Distance Education*, 9(3), pp. 267-284.

Fisher, M., Thompson, G. S., and Silverberg, D. A. (2004-5) 'Effective group dynamics in e-learning: Case study', *Journal of Educational Technology Systems*, 33(3), pp. 205-222.

Gerber, M., Grund, S. and Grote, G. (2008) 'Distributed collaboration activities in a blended learning scenario and the effects on learning performance', *Journal of Computer Assisted Learning*, 24(3), pp. 232-244.

Henry Ford (no date) *AZ Quotes*. Available at: <https://www.azquotes.com/quote/99148> (Accessed: 9 June 2023).

Ho, C. and Swan, K. (2007) 'Evaluating online conversation in an asynchronous learning environment: An application of Grice's cooperative principle', *The Internet and Higher Education*, 10(1), pp. 3-14.

Hurst, G. (2020) 'Online Group Work with a Large Cohort: Challenges and New Benefits', *Journal of Chemical Education*, 97(9) pp. 2706-2710.

MacDonald, J. (2003). 'Assessing online collaborative learning: Process and product', *Computers & Education*, 40, pp. 377-391.

Palmer, S., Holt, D. and Bray, S. (2008) 'Does the discussion help? The impact of a formally assessed online discussion on final student results', *British Journal of Educational Technology*, 39(5), pp. 847-858.

Paulus, T.M. (2006) 'Challenge or Connect? Dialogue in Online Learning Environments', *Journal of Computing in Higher Education*, 18(1), pp. 3-29.

Razmerita, L., Kirchner, K., Hockerts, K. and Tan, C-W. (2020) 'Modeling Collaborative Intentions and Behavior in Digital Environments: The Case of a Massive Open Online COURSE (MOOC)', *Academy of Management Learning & Education*, 19(4), pp. 469-502.

Rovai, A.P. (2007) 'Facilitating online discussions effectively', *The Internet and Higher Education*, 10(1), pp. 77-88.

Salmon, G. (2003) *E-moderating: The Key to Teaching and Learning Online*, 2nd edition, London: Taylor & Francis Books Ltd.

Selliotto, C. (2011) 'Capabilities Associated with University Group-work Activities: Experiential Benefits, Personal Attributes and Practically-acquired Skills', *International Journal of Learning*, 18(1), pp. 401-410.



## Essential Student Skills: Collaborative learning

Shelton, B., Hung, J-L. and Lowenthal, P. (2017). 'Predicting student success by modeling student interaction in asynchronous online courses', *Distance Education*, 38(1), pp. 59-69.

Skinner E. (2009) 'Using community development theory to improve student engagement in online discussion: a case study', *Research in Learning Technology*, 17(2), pp. 89-100.

Sobko, S., Unadkat, D., Adams, J. and Hull, G. (2019) 'Learning through collaboration: A networked approach to online pedagogy', *E-learning and Digital Media*, 17(1), pp. 36-55. Available at: <https://doi-org.eor.uhi.ac.uk/10.1177/2042753019882562> (Accessed 18 December 2020).

Thurber, D. and Trautvetter, L. (2020) 'Examining student reported interaction and satisfaction in higher education administration graduate seminar-style blended courses', *Online learning*, 24(3), pp. 184-202.

Wickersham L.E. and Mcgee, P. (2008) 'Perceptions of Satisfaction and Deeper Learning in an Online Course', *Quarterly Review of Distance Education*, 9(1), pp. 73-83.