Effective practice in the design of directed independent learning opportunities

Summary of the main research report

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Background and aims of the study

This is a summary of a study of directed independent learning (DIL), commissioned by the Higher Education Academy (HEA) and the Quality Assurance Agency (QAA), and undertaken by Liz Thomas Associates between April and September 2014. The full report is available at https://www.heacademy.ac.uk/node/10750.

There are concerns in some quarters about the quality and value for money of higher education (HE), stemming, at least in part, from misperceptions about the purpose, requirements and anticipated outcomes of studying in higher education. Attention is often focussed on the (limited) amount of contact between staff and students in certain subjects and the differential contact time in the same subjects in different institutions. Media coverage has raised wider interest in the topic, suggesting that contact hours might be a measure of quality or ‘value for money’ in a fee-paying environment.

Gibbs (2010), however, is quite clear that the number of contact hours between staff and students has very little to do with educational quality, but rather the approach to teaching and the quantity and quality of study is what determines the value of the educational experience. The notional learning hours associated with qualifications, programmes and individual units of study are based on a broad agreement across institutions that students can expect to spend ten hours learning on average in order to gain one academic credit unit. This includes time spent in scheduled learning and teaching activities and private/personal study (for example, preparation for taught sessions, reading, preparation for assignment tasks, revision, and so on). It is this additional study that broadly constitutes directed independent learning.

In this study ‘directed independent learning’ has been understood as learning in which students are guided by curriculum content, pedagogy and assessment, and supported by staff and the learning environment, and in which students play an active role in their learning experience – either on their own, or in collaboration with peers.

DIL plays a central role in the higher education experience and makes an important contribution to student achievement.

The aims of this study are two-fold:

1. To discover what academic staff, students and others have found to be the most effective practices in the inception, design, quality assurance and enhancement of directed independent learning.
2. To explore how best to communicate and promote effective directed independent learning to students, potential students and parents; teaching and professional staff, curriculum designers and educational developers; senior managers, professional bodies employers and other stakeholders.

Main findings

The research was structured around ten research questions, which are used to present the findings.

Definitions and usage How is directed independent learning defined, conceptualised and utilised across the HE sector and disciplines?
There is not a single, preferred definition of directed independent learning, either in the literature or in the sector – or within most institutions. Lack of clarity can cause uncertainty and impact negatively on students’ ability to be independent learners. It also makes it more difficult for staff to create meaningful DIL opportunities for their students. This confusion is related, at least in part, to different views about the autonomy of students, the role of staff, the purpose and benefits of independent learning and the approach to be used.

**Benefits** What are the benefits of directed independent learning, and which are perceived to be the most effective by students, teaching staff and other stakeholders?
The most important benefits for students appear to be engagement with the real world and developing graduate attributes. The benefits are multiple, but sometimes they are taken for granted by staff, and are not always explicit to students. This research identified the following benefits from directed independent learning:

- extending subject knowledge by covering more material than could be covered in face-to-face sessions only, moving beyond the basic/minimum level of understanding towards deeper learning, and understanding theory by relating it to practice;
- personal and academic development by enabling students to learn how to learn and become effective lifelong learners, and taking greater responsibility for managing their learning;
- encouraging students to feel like they belong to the academic community and the institution (or academic programme), and developing a network of support;
- engaging and motivating students by showing the relevance and value of their study in real world situations, and enabling them to become deeper learners;
- developing students’ graduate attributes, including developing professionalism in a particular field, developing employability skills, internationalising the curriculum experience, and familiarising students with modern technology;
- providing a way of monitoring students’ engagement and learning progress;
- practical benefits for students in relation to flexibility, place and pace of learning.

**Quality assurance and enhancement** How is the quality of directed independent learning measured, assured and enhanced?
Overall there are limited signs of quality measurement, assurance and enhancement explicitly in relation to directed independent learning at the institutional and disciplinary levels, suggesting the need for stronger internal quality assurance processes with regards to DIL. Few examples of initial and continuing professional development with respect to DIL were identified. Developing and supporting directed independent learning modules is very time consuming and often unrecognised.

**Curriculum design** To what extent is directed independent learning designed into the curriculum programme?
Independent learning seems to be more effective when it is fully integrated into the programme of study, is explicit in its purpose, and is structured to provide students with clarity about what is required. In some discipline areas however, there appears to be more reluctance to be prescriptive (for example, ‘free composition’ in Music) and thus structure is provided in different ways.

**Capacity development** How is student capacity developed to undertake directed independent learning?
Transition into higher education is challenging for students. Staff from all discipline areas and institutional types commented on the need to support and prepare students for directed independent learning in higher education. Effective approaches to DIL include:
• providing a clear structure of what to do and explicit guidance about what is required;
• a ‘safe space’ for ‘learning to learn’;
• support from staff and the opportunity for students to check that they are on the right lines, which can be enabled through technology as well as face to face;
• peer support;
• guidance on how to be reflective and better understand the learning process; and
• support with specific skills required (e.g. ICT).

Independent learning needs to be monitored to identify students who are struggling and need support. Finally, it is widely agreed that a staged or ‘scaffolded’ process is needed to enable students to move from being dependent learners to autonomous ones by the end of their undergraduate education.

Assessment and feedback What is the role and contribution of formative and summative assessment and feedback to directed independent learning?
Assessment is integral to effective directed independent learning. Assessment can generate motivation for students to engage, provide a useful mechanism for interaction between students and academic staff, and offer students feedback to improve their study processes and outcomes in the future. A combination of formative and summative assessment in DIL appears to be particularly valuable.

Student diversity What are the advantages and challenges of directed independent learning for different student groups, e.g. international learners, disabled students, those with caring and employment responsibilities or who have to travel long distances?
Directed independent learning can offer more flexibility and thus be more inclusive than some other forms of learning and teaching. The extensive use of technology and online learning allows material to be provided in different formats, to meet different learning preferences and entitlements, and to offer flexibility about when and where students engage. Group learning can create challenges to enable all students to participate. One solution is to build this into the module design, both in terms of limiting the amount of time students need to be together, and encouraging them to find solutions to meet the needs and circumstances of group members.

Staff engagement and support How are staff engaged and supported to deliver effective directed independent learning?
There is a need for more staff to be engaged and supported to deliver effective directed independent learning opportunities. This requires an institutional environment that encourages and legitimises staff developing new independent learning opportunities, and so institutional policies and strategies must draw explicit attention to DIL. Programme teams need to work together to develop consistency and shared approaches towards DIL. Engaging more staff needs to be reinforced by staff development for new and existing staff, including sharing practices. Staff also need practical support, especially in relation to the use of new technology.

Communication How is the nature, role and contribution of directed independent learning communicated to potential students, existing students, parents, employers, professional bodies and other stakeholders?
Students – and their families – need to be better informed about directed independent learning – both before and after entry to higher education. Understanding and expectations of DIL should be integrated into marketing and recruitment materials and practices, including open days. Once in higher education, students’ understanding of DIL comes primarily from academic staff, through the induction process and early teaching. There is a need to clarify the difference between higher education and previous learning in school and college; individual responsibility for learning needs
to be explained and practised; and links between independent learning and attainment, employment and professional bodies should be explored. Employers and professional bodies value independent learners, and so can be encouraged to collaborate in various ways to develop engaging individual learning opportunities which are beneficial to students, and other stakeholders, including employers.

**Disciplinary, institutional and study-mode differences** To what extent do practices, preferences and views differ across the disciplines, modes of study and/or institutional types? It is difficult to conclude with certainty about disciplinary and institutional differences. Examples of practice were received from across the sector in terms of institutional type and discipline areas. Respondents from all types of institution felt that their students are under-prepared for independent learning. DIL practices do not vary significantly by subject or institutional type. It should be noted however that fewer examples were received from hard/pure subjects (e.g. Biological Sciences and Physics) than the other discipline groups. Success has been achieved by making independent learning relevant to vocational and professional practice, which is more easily achieved in applied subjects (e.g. Medicine or Social Work). The form that DIL takes (e.g. problem-based learning or enquiry-based learning) differs according to discipline.

**Methodology**

The study was designed to take account of different disciplinary and institutional contexts. It has used a mixed-methods research design, comprising a quantitative literature review, the collection of examples of directed independent learning from across the sector and eight in-depth qualitative case studies, combining a case-study methodology with the principles of appreciative inquiry. A *Compendium of effective practice in directed independent learning* has also been produced, providing a rich resource illustrating how directed independent learning is taking place across the UK higher education sector and beyond.

**Model for improving directed independent learning**

By combining these ‘ideal’ worldviews and associated solutions an integrated model or system for improving DIL has been generated.

In the diagram on page 7 the following key should be followed:

- Blue circles are outcomes
- Red circles are other stakeholder groups
- Rectangles (blue and red) are means of achieving the outcomes
- Blue indicates essential elements for effective directed independent learning.
- Red indicates desirable elements – policies, processes and groups that could contribute to more effective directed independent learning.
- The arrows indicate the direction of impact; most are uni-directional, others are bi-directional. The dashed lines indicate potential links which have not been fully explored through this study.
Effective Directed Independent Learning (DIL) System

Clarity and leadership about independent learning and DIL
- Institutional plan
- Learning and teaching strategy
- Quality assurance processes
- Staff development and support
- Work allocation model

Marketing → Recruitment → Induction → Student voice → Understanding of learning gain rather than contact hours

Better student outcomes

QAA → Provisions of suitable directed independent learning opportunities
- HEA
- Alums
- Employers

Monitored → Clarity and structure → Relevance → Supportive → Flexible and inclusive → Development of student capacity and engagement for DIL

Please refer to the key on page 6.
Clarity and leadership about directed independent learning
There is a need for institution-wide understanding of directed independent learning, and leadership commitment to inform and enhance DIL. For example, a commitment to independent learning could be in the institutional mission statement. The learning and teaching strategy could provide further clarification about definitions, benefits, expectations and approaches. The learning and teaching strategy could then be enacted through the quality assurance processes, provision of staff development and support, and the work allocation model. The QAA and the HEA could play a role in enabling institutions to develop appropriate procedures for quality assurance and enhancement to improve DIL.

Understanding of learning gain rather than contact hours
Clarity about DIL can be translated into students’ (and their families’) understanding. In particular students need to develop different expectations about learning in higher education, and this is intimately connected to an appreciation that the quality of the learning experience should be measured in terms of learning gains rather than contact hours, and that this will translate into positive outcomes for students, such as a good degree and graduate outcomes. The institution can make use of various existing processes, including marketing, recruitment, induction and the student voice.

Provision of suitable independent learning opportunities
Within an institution-wide understanding of DIL, staff can develop and deliver suitable and effective directed independent learning opportunities, informed by their own disciplinary and professional context, values, norms and concepts. Effective practice includes:

- **Clarity and structure** for students about what is required.
- **Relevance**: making it explicit to students why DIL is required, and linking this to personal benefits and aspirations.
- **Support** to ensure all students are able to undertake independent learning.
- **Flexibility and inclusivity**: some students experience challenges in participating fully in aspects of their HE experience, and directed independent learning can offer flexibility with regard to what is studied, when and where, and preferred approaches to learning. When designing directed independent learning activities, care should be taken to think whether some groups of students will experience more difficulty than others.
- **Student monitoring** to check who is participating in independent learning activities and to what degree, and to check understanding and performance.

Development of student capacity and engagement
Fundamental features of effective directed independent learning include student capacity and engagement. Engagement can be enhanced through the use of assessment and real-world relevance. Capacity relates to academic skills, practical skills such as technical abilities and professional skills, and other capacities such as time management and group working. It should not be assumed that students are independent learners, but that they should be by the end of their undergraduate studies, and thus scaffolding to move students from dependent to independent learners should be provided. This needs to be supported by formal and informal opportunities for students to check-in with academic staff and gain reassurance that that they are on the right track, or be corrected as necessary. Capacity and support can be provided by formative assessment, peer and online interactive activities. Students want their development to be integrated into their learning, and to be relevant to their discipline, but embedded, discipline-specific skills development may be supplemented by services provided by central student services.
Improved student performance

Improving directed independent learning and making it more effective will generate better outcomes for all students, and will also provide positive benefits for families, professional bodies, employers and higher education institutions themselves. This model can therefore be perceived as a virtuous circle.

Recommendations

Institutions

- Institutions ought to take an integrated approach to improving directed independent learning, drawing on the schematic approach presented in the analytical model.
- In particular, institutions should adopt a clear definition of directed independent learning, and foster understanding of this among staff, students and other stakeholders.
- This should be reflected in institutional polices, processes and functions, such as learning and teaching strategies, internal quality assurance and review processes, staff development and support, work allocation model, marketing, recruitment, student induction and student services.
- Consideration should be given to embedding directed independent learning into accredited initial postgraduate certificate programmes and continuing professional development opportunities.
- Institutional communication with students, families and other stakeholders should provide clarity about what directed independent learning is and its benefits, to ensure understanding of the importance of learning gain rather than focussing on contact hours.
- Academic departments, programme teams and individual academics should ensure that they provide students with clarity and structure about directed independent learning activities and offer opportunities that are relevant and engaging for all students. Learning should be delivered flexibly and inclusively to ensure all students can engage fully, and formal and informal support needs to be available using a range of media.
- Student participation in and understanding of specific DIL activities needs to be monitored, and there should be procedures for appropriate follow-up.
- Staff should not assume that students have all the necessary academic or practical skills to be effective independent learners, but rather that this is an anticipated outcome of undergraduate higher education. Appropriate support and capacity building should be provided for students, but the need for this will decrease gradually over time.

Quality Assurance Agency

- The UK Quality Code for Higher Education (QAA 2012, Chapter B3) expects that institutions should enable every student to develop as an independent learner. This study suggests that internal quality assurance procedures do not sufficiently focus on directed independent learning. The QAA could consider how it can work with higher education providers to build good practice for DIL into internal quality processes.
- The principles of effective practice identified in this study should be disseminated in enhancement materials made available for higher education providers.

Higher Education Academy

There is a lack of initial and continuing professional development explicitly relating to directed independent learning. The HEA could:

- Encourage and support higher education institutions to embed directed independent learning into accredited initial postgraduate certificate programmes.
• Continue to offer continuing professional development opportunities about directed independent learning for more experienced staff, drawing on this study and the *Compendium of effective practice in directed independent learning*.

• Facilitate sharing of practice, particularly in cognate discipline areas, but also more generally.

• Work with institutions to facilitate a more institution-wide approach to directed independent learning to improve student outcomes based on the findings of this study.

References


Hills, L. and Rose-Adams, J. (2014) Open to All? The Impact of Curriculum and Technological Change on the Experience of Widening Participation Students Studying science at the Open University. Widening participation through curriculum, 30 April – 1 May 2014, Milton Keynes


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