STRATEGIC AND LEADERSHIP PERSPECTIVES ON DIGITAL CAPACITY IN IRISH HIGHER EDUCATION

T&L

NATIONAL FORUM
FOR THE ENHANCEMENT OF TEACHING
AND LEARNING IN HIGHER EDUCATION

Strategic and Leadership Perspectives on Digital Capacity in Irish Higher Education

Jim Devine

A report commissioned by the National Forum for the Enhancement of Teaching and Learning in Higher Education

Chair and Director's Preface

This report, commissioned by the National Forum for the Enhancement of Teaching and Learning in Higher Education (National Forum), outlines strategic and leadership perspectives on building digital capacity across the Irish higher education sector. Conducted in tandem with the development of an extended roadmap focused on building digital capacity (to be published in the first quarter of 2015), it explores and analyses leadership perspectives along with the stated strategic objectives of Higher Education Institutions (HEIs) articulated in the Mission-based Performance Compacts (Compacts). This scoping exercise adds value by analysing the level of explication that has been articulated within institutions' formal strategies, by exploring the differences and similarities between institutional types in this regard, and by gaining valuable senior management insights into some of the key challenges and opportunities that our institutions are grappling with when it comes to enhancing teaching and learning with digital technology.

It is encouraging to note that many of the perspectives provided by respondents echo the priorities and concerns captured in the National Forum's emerging Digital Roadmap, and to see that there is a clear appetite for embracing more fully the potential that technology presents. The innovation that has been fostered in our HEIs, particularly in recent economically straitened times, also underlines the level of commitment and the recognition of technology's potential as an ally of teaching and learning.

However, this report also highlights deficiencies and challenges that the sector needs to address. While digital capacity is seen as an important dimension of strategic development for HEIs, its potential has not yet been fully realised. We are cautioned against building digital capacity for its own sake, and encouraged to develop a clear picture of how and why technology needs to be embraced in the interests of excellent teaching and learning. Many of the respondents who informed this report pointed to the need for a shared language when it comes to aspects relating to building digital capacity. For example, there are different definitions and terminologies about what constitutes 'flexible' or 'distance learning' students. A shared set of assumptions and definitions is required. The importance of technological interoperability between institutions is highlighted and the report clearly shows senior management's widespread recognition that current initiatives while innovative, are generally 'fragmented, piecemeal and often unsustainable'. Respondents underline how crucial Continuing Professional Development (CPD) for academic staff is when it comes to building digital capacity, and that reaching students online or from a distance will be where the greatest organisational change will be observed.

All of the findings in the report further reinforce the need for a coherent, evidence-based national digital roadmap, though senior managers' perspectives see that the roadmap may operate more as an atlas, than as a series of definite directions. Each institution must determine its own path in this new and emerging context. This report adds another key perspective in assisting that process.

We are very grateful to Jim Devine for his assistance as the researcher and writer of this report, and to all of the senior managers with whom he interacted, who gave of their time and expertise so generously in order to inform the sector in this important way.

Sarah Moore

Chair, National Forum

Terry Maguire

Director, National Forum

Acknowledgements

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1. Context

This report addresses a leadership perspective on digital capacity from two angles. On the one hand, HEI strategies are now aligned with the National Strategy for Higher Education through 'Mission-based Performance Compacts' and our universities, institutes of technology (IoTs) and colleges have been asked to make explicit their goals for modernisation of teaching and learning and for widening access and participation. On the other hand, leadership for innovation and change that is sustainable, widespread, cross-institutional and that benefits all students in higher education (HE) is challenging, and the perceptions of Registrars and others in academic and/or learning support leadership roles is valuable in elaborating an understanding of gaps between aspirations and reality and about how they can be bridged.

Building digital capacity in higher education is about developing 'skills, competences and attitudes that enable people to work, live and learn in a complex world that is increasingly digital'.[1]

This speaks in a particular way to the vision for change articulated in the National Strategy for Higher Education:

> *The nature of the learning community and the modes of teaching and learning will also change significantly over the coming years. These changes will be supported through innovative approaches to research-led teaching and learning, programme design, student assessment and a quality assurance system – all of which will reflect a new emphasis on nurturing creative and innovative minds.*[2]

It also speaks to an agenda currently being addressed by the European Commission's High Level Group on the Modernisation of Higher Education (HLG), whose members set out a vision in their first report (2013) for the 'shared process' of teaching and learning in higher education and for active, engaged learning in which students are:

> *…faced with problems which they think are important [and where they] need to engage with new questions which are bigger than the course itself, which have relevance to their own lives and which provoke a lively participation far beyond simply getting through assessment or exams.*[3]

While student access to fixed and/or mobile internet is ubiquitous, at least on campus, that is not to say that the challenges of providing a robust, scalable and sustainable digital infrastructure have been fully overcome. However, these challenges are now well understood and quantifiable.

Building digital capacity, on the other hand challenges us to address the complex and dynamic balance between innovation in academics' teaching practices and the changing expectations and learning experience of students. In turn these must be situated within the wider context of national policy and funding constraints and how these are being addressed through institutional strategic planning processes.

The second report of the High Level Group on the Modernisation of Higher Education (2014) focuses specifically on 'new modes of learning and teaching in higher education' and asserts:

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1   National Forum for the Enhancement of Teaching and Learning in Higher Education (2014) *Principles and First Insights from the Sectoral Consultation on Building Digital Capacity in Irish Higher Education*, p.5. www.teachingandlearning.ie/wp-content/uploads/2014/05/Digital-Roadmap-PHASE1MAY282014.pdf.

2   Higher Education Authority (2011) *National Strategy for Higher Education to 2030: Report of the Strategy Group*, p.26. http://www.hea.ie/sites/default/files/national_strategy_for_higher_education_2030.pdf.

3   High Level Group on the Modernisation of Higher Education (2013) *Report to the European Commission on Improving the Quality of Teaching and Learning in Europe's Higher Education Institutions*, p.18. http://ec.europa.eu/education/library/reports/modernisation_en.pdf.

*There remains a culture of conservatism within European higher education which needs to change…
[w]hile a broad range of good practice is already emerging across Europe, this is happening to a large
degree in an unco-ordinated bottom-up approach. It is now time for governments and institutions to
develop comprehensive strategies at both the national and institutional level for the adoption of new
modes of learning and teaching within higher education.*[4]

The focus on digital capacity building has shifted decisively towards questions of professional development
of academic staff in their teaching roles and to the organisational factors that must be addressed in order to
embed changes of scale and sustainability. The question of organisational change cannot be understated,
and it is essential to have a clear understanding at institutional (or at least at departmental) level about
the outcomes/impacts to be expected and achieved in order to make sense of particular initiatives and
the platforms that support them. A recent evaluation of enhancement initiatives supported by the Higher
Education Funding Council for England (HEFCE) draws particular attention to the consequences of weak
or implicit theories of change that too often underpin the rationale for specific local initiatives: '[t]he overall
impact of [a] weak theory of change appears to be that the enhancement initiatives have had more impact
on individuals than on changing cultures across the sector'.[5]

A leadership perspective must somehow take account of significant bottom-up innovation potential and
at the same time situate this in a wider strategic institutional context. But this leadership perspective
cannot be seen in isolation. Significant digital capacity can only be built through sharing and alignment of
perspectives that also include those provided by individual academic staff as practitioners, staff in learning
support roles and, of course, students themselves (see Figure 1).
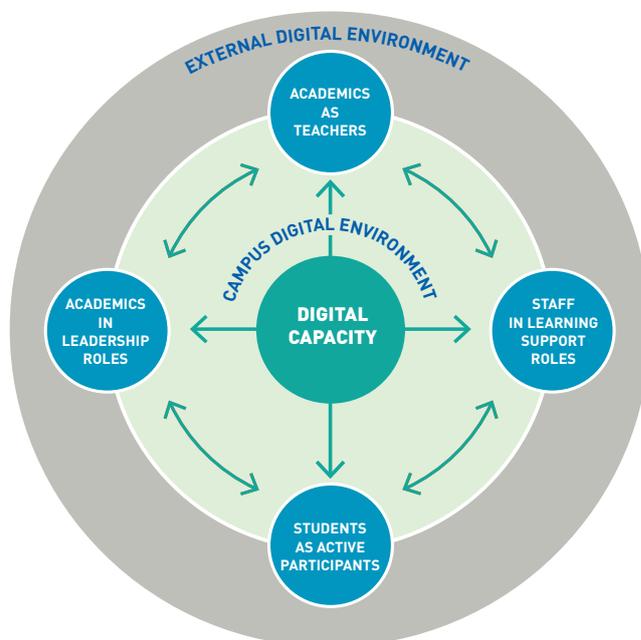
Figure 1. Alignment of Digital Capacity Perspectives

This report addresses one perspective in order to contribute to the wider picture of how a digitally mediated
learning environment, both on and off campus, can underpin a clearly defined modernisation agenda.

4   European Commission (2014) *Report to the European Commission on New Modes of Learning and Teaching in Higher Education*,
      p.11. http://ec.europa.eu/education/library/reports/modernisation-universities_en.pdf.
5   Trowler, P., Ashwin, P. and Saunders, M. (2014) *The Role of HEFCE in Teaching and Learning Enhancement: A Review of Evaluative
      Evidence*. The Higher Education Academy, p.16. https://www.heacademy.ac.uk/sites/default/files/downloads/The_role_of_HEFCE_in_
      TL_Enhancement_final_report.pdf.

2. Approach

The publication of the first cycle of Mission-based Performance Compacts (2014–2016) marks the implementation of performance based funding within the Irish higher education system and provides a new basis for a strategic dialogue between individual institutions and the Higher Education Authority (HEA), the context for which is provided by the National Strategy. Insofar as the Compacts include specific elements on widening participation, enhancement of the student experience and quality, they provide an anchor for committed strategic actions, a number of which explicitly or implicitly require a mature level of digital capacity. The Compacts provide *one* snapshot in time with an insight into what is being prioritised for action at national level and how individual HEIs align their responses in the context of their autonomy and individual strategic plans.

The approach taken by Trowler, Ashwin and Saunders (2014) provides a conceptual framework to underpin the analysis of strategic positions and measurable targets documented in HEI Compacts. In their model, enhancement extends from incrementalism (reform agenda) to reinvention (transformational agenda), see Figure 2.

Menu of aims

Add to the curriculum	Increase efficiency, effectiveness or economy	Increase equity of outcome	Increase equity of experience	Change student outcomes	Change student experience	Increase equity of access	Change teaching and learning practices	Change the environment, artefacts to become more enabling	Change power relations between students and staff

Degree of change

Enhancement as incrementalism (Reform agenda)		→		**Enhancement as reinvention** (Transformational agenda)
Do the same in the old way but better	Add new things to old things and do them in the old way	Do completely different things in the old way	Do completely different things in some new ways	Do completely different things completely differently

Figure 2. Aims and Degrees of Change[6]

In addition a richer picture has been developed through a consultation process involving one-to-one interviews with Registrars, also including in some cases staff with institution-wide responsibility for learning support. In all, 24 institutions participated in this process and interviews were conducted in May 2014, in the period immediately following completion of the institutional Compacts.

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6   Based on Ibid., pp.7 and 8.

2.1.   Mission-based Performance Compacts

Mission-based Performance Compacts for 26 HEIs were examined. These included 7 universities, 14 institutes of technology and 5 other colleges (four representing Teacher Education and the National College of Art and Design).

Mission-based Performance Compacts address teaching and learning primarily but not exclusively in Sections 5.2 and 5.3 and distil the strategic context into the following questions:

– 'Please provide a brief summary of <HEI name's> strategy and chosen objectives in relation to participation, equal access and lifelong learning' (5.2).

– 'Please provide a brief summary of <HEI name's> strategy and chosen objectives in relation to excellent teaching and learning and quality of the student experience' (5.3).

Other priorities, such as the formalisation of regional or thematic clusters, are also relevant, as are other important areas such as industry liaison and community engagement.

Institutional profiles are also instructive, particularly the projection to 2016 of student numbers and the mix of full-time, part-time and remote students envisaged. These projections are particularly relevant given that the ability to deliver flexibly to a more diverse student cohort is arguably dependent to an increasing degree on building digital/online capacity.

The Compacts have therefore been examined in detail to elicit all references that can be considered to have a bearing on digital capacity and on the related ability to set targets for flexibility and diversity in programme delivery.

The approach adopted in this report is not without its limitations. In compiling Compacts, HEIs are responding to particular questions. The response requested under Section 5.3 of the Compacts (see above) is to a relatively imprecise and open-ended question when compared with the more specific goals articulated in the national strategy:

Higher education students of the future should have an excellent teaching and learning experience, informed by up-to-date research and facilitated by a high-quality learning environment, with state-of-the-art learning resources, such as libraries, laboratories, and e-learning facilities.
...In light of the scale of transformation in teaching and learning that is underway in Irish higher education, the quality assurance framework must be reviewed and further developed.[7]

Responses elicited in the Compacts do not have to explicitly address the question of 'state-of-the-art learning resources, such as libraries, laboratories, and e-learning facilities' and failure to mention them does not necessarily imply that individual institutions are not attaching strategic priority to them.

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7   Higher Education Authority (2011) *National Strategy for Higher Education to 2030: Report of the Strategy Group,* pp.61–62.

In comparison, it is worth noting the more directed questions posed in corresponding sections of the template for the Australian Mission-based Compacts. For the first cycle (2011), a specific response was required under four headings:

– Quality

– Equity

– Enrolments

– Infrastructure

The 'infrastructure' sub-section included the following clear statements of strategic intent, designed to elicit specific rather than more general responses from institutions:

The Commonwealth is committed to the development of world class higher education infrastructure. A contemporary, technology rich, well designed and equipped campus environment has a positive influence on staff and student performance and satisfaction.
...optimising the use of existing facilities, refurbishing and adequately maintaining existing infrastructure, investing in e-learning and other information and communications technologies (ICT).[8]

It may be beneficial for future Compacts to adopt more precise questions to enable institutions to describe their targets and activities more accurately.

2.2. Analysing the Mission-based Performance Compacts

Compacts were examined to identify all mentions (in any section) relevant to digital capacity. Where institutions documented specific targets, these too were noted separately.

A template was designed incorporating a total of 12 categories under which mentions and targets could be recorded. These are outlined in Table 1 below:

8   Australian Mission-based Compacts – Cycle 1 (2011–2014). See for example the Compact agreed with the University of Sydney. http://sydney.edu.au/documents/about/government/mission-based-compact-at-May12.pdf.

Table 1. Categories for analysis of Mission-based Performance Compacts

	Category	Description
Reform ↓ **Transform**	Additionality	<u>Additionality</u> for campus-based students through Virtual Learning Environment (VLE)/digital platforms/digital resources
	'Blended'	<u>Extending/modifying the campus-based paradigm:</u> intentions to redesign programmes to incorporate hybrid or blended learning elements
	New Audiences	<u>Reaching new audiences:</u> extending access to existing or new accredited programmes through part-time/online/hybrid delivery
	Inter-institutional	<u>Inter-institutional collaboration</u> to design and deliver programmes
	International	<u>Online</u> International Delivery of Programmes
Support	Generic Student Support	General supports for student learning and welfare (<u>explicitly digitally-supported</u>)
Capability ↑↓	Staff to support TEL	Educational technologists and designers embedded within departments or operating through a centralised support unit
	Academic Staff CPD	All references to professionalisation of the teaching role of academics, including aspects pertaining to digital pedagogy
	TEL Infrastructure	Indications of proposed investment/development of facilities
Emerging ↑↓	Open Education Resources	Plans to develop and/or incorporate Open Education Resources (OER); policies for OER
	Learning Analytics	Indications of intentions to deploy learning analytics
Other	Other Remarks	More general references not included in the above categories

This framework identifies five distinct but overlapping stages of enhancement of the teaching mission, characterised by the extent to which the capability to achieve them is developed or is intended to be developed. As such, it attempts to track indications in the Compacts of both the stated appetite and capacity for change, from incremental to transformational and the extent to which digital capacity underpins this. A further category seeks to capture references to generic (i.e., not specific to academic programme) supports for learning and student welfare more generally.

A further three elements in the analysis framework focus on questions of in-house strengths in technology enhanced learning (TEL): core staff such as educational technologists available to support TEL, intensity of efforts towards professional development of academic staff in their teaching roles and the maturity/sustainability of the learning infrastructure including digital platforms and learning spaces.

Having regard to international developments, two further elements were included in the template to capture references, if any, to emerging policies and practices for open education resources (OER) and

learning analytics. Finally, a 'catch-all' box was included for any references that could not readily be included under any of the above. A compendium of the terminology (see Appendix 1) served as a guide to reading compacts.

2.3.   Semi-structured Interviews with Registrars

A number of options was considered in eliciting an academic leadership perspective for the purposes of this report. Institutional positions could be determined to some extent through desk research, (looking for example at strategic plans and strategies for teaching and learning where these exist). A key decision was taken to focus on academic leaders with significant operational roles in relation to programmes and quality assurance. Registrars/VPs for Academic Affairs were thus approached on the basis that their insights would be grounded in the day-to-day realities of institutional guidance and governance in the context of current severe resource constraints. The Registrars/VPs for Academic Affairs were invited to engage in one-to-one interviews. In all, 24 HEIs participated. Interviews took place either face to face, by videoconference or by telephone. Interviews lasted from between 30 to 40 minutes. The seven open-ended questions provided in advance are shown in Table 2 below.

Table 2. Questions Addressed in Semi-structured Interviews with Registrars

What are your key <u>concerns</u> and <u>aspirations</u> for the sector when it comes to enhancing teaching and learning in an increasingly digital age (using available and emerging technology)?
What opportunities currently exist for developing <u>a sectoral approac</u>h to building digital capacity in Irish higher education? Conversely, are there approaches <u>that definitely should not be attempted</u> at sectoral level?
What do you consider to be good examples of practice either nationally or internationally?
Can you identify specific actions in support of digital capacity building that are tangible/possible and that are realistically achievable within the current challenging operating environment at INSTITUTIONAL LEVEL?
Can you identify specific actions in support of digital capacity building that are tangible/possible and that are realistically achievable within the current challenging operating environment at SECTOR LEVEL?
Are there specific digital capacity building actions that may be desirable (or even urgent) but which would be difficult to undertake at this time?
Anything relevant, not included above?

Respondents provided their insights on the basis that their responses and comments would be summarised without attribution. This enabled conversations to extend significantly beyond the more formal positions discernible in published strategic documents.

3. Findings

The sections that follow summarise the analysis of Mission-based Performance Compacts and compare and contrast this with the themes emerging from the interviews with Registrars.

3.1. Capturing the Content of the Mission-based Performance Compacts

The template designed to capture relevant information provides a visual matrix with dimensions 12 x 52, representing the 12 categories previously described and 2 x 26 = 52 columns, representing the possible 'mentions' and 'explicit targets' for 26 HEIs. Tables showing the distribution of 'mentions' and 'explicit targets' can be found in Appendix 2.

The matrix allows for certain comparisons and insights to be made. At first glance, the matrix appears sparsely and unevenly populated. This relative sparseness should not be surprising, however, given the open-ended nature of the questions posed under Sections 5.2 and 5.3 of the compact template. Total 'mentions' (122) represent just 39% of 'mention' possibilities. Total references to 'explicit targets' (62) represent just 20%.

Also interesting to note is the number of HEIs whose Compacts provided responses of considerable detail in respect of digital capacity. Some 5 of 7 universities, 5 of 14 IoTs and 2 of 5 other colleges were categorised as having 'much to say' about digital capacity.

The overall pattern is something of a patchwork that does not present a picture of a higher education sector with a shared understanding or cohesive vision for digital capacity. However, a more nuanced understanding can be inferred from closer inspection of individual categories and of how responses differ between universities, institutes of technology and other colleges.

Analysis of compacts across the sector (Rhetoric or Reality?)

A comparison of 'mentions' and 'explicit targets' for all of the 26 HEI Compacts analysed is presented in Figure 3.

What is evident is the gap that exists between intentions or aspirations (expressed as 'mentions') and the ability of HEIs to attach explicit targets to them for the period covered by the Compacts up to 2016. This may reflect uncertainties about resources (staffing, under the Employment Control Framework (ECF), or budgets in general) or a lack of clarity about the specific actions that might be required to turn aspirations into reality.

For example, where aspirations are high and targets align with aspirations, we can infer that HEIs agree on two things:

– the importance of the particular aspiration
– that there is a clear understanding of the nature and feasibility of that aspiration.

This is evident in the case of the New Audiences. Mentions or aspirations are at a level of 60%. More than 50% of HEIs attach explicit targets to these aspirations. For the most part, targets for new audiences relate to postgraduate and professional education.

By far the greatest level of agreement, at 70% of HEIs, is on the importance of **CPD for academic staff**; however only 40% of institutions have been explicit about their targets in relation to this. There is even less agreement across the other categories.
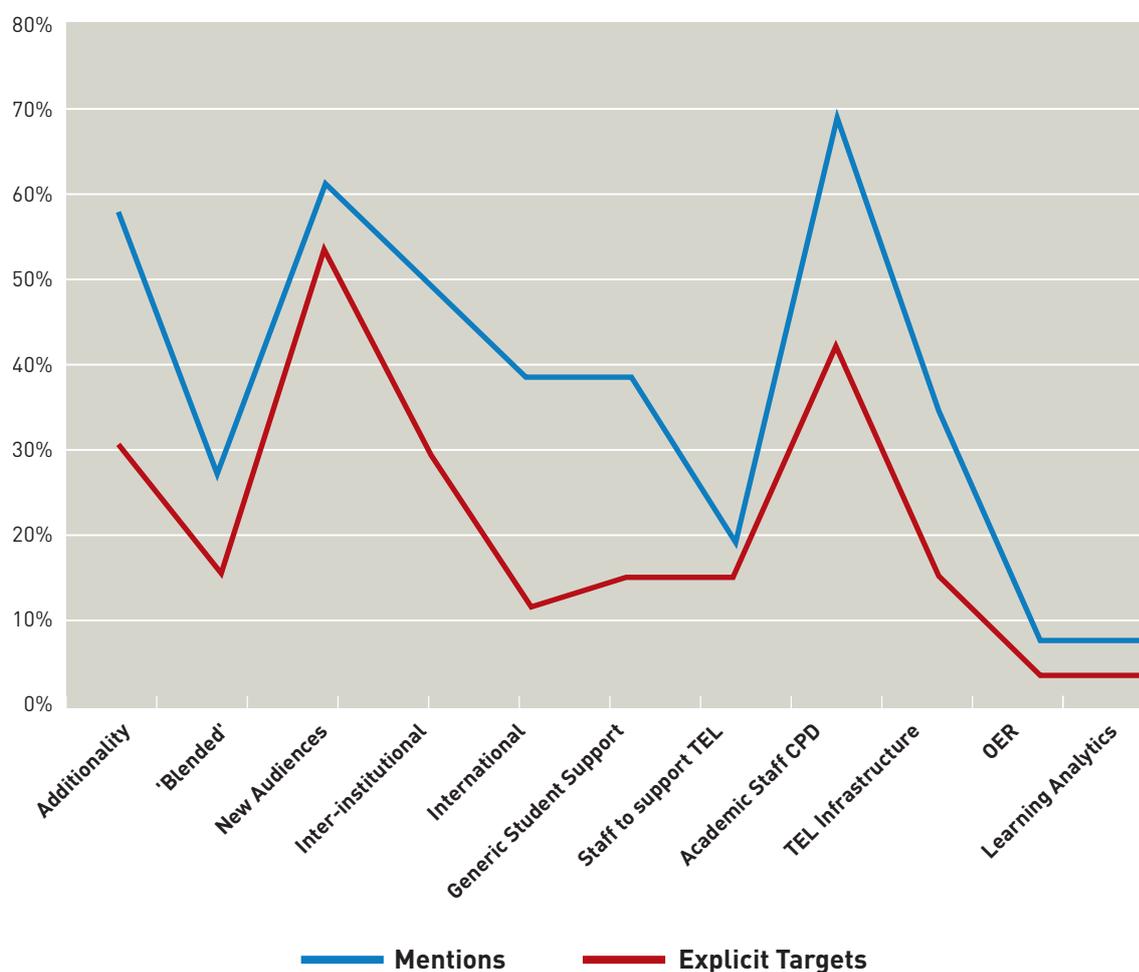
Figure 3. Mentions and Corresponding Explicit Targets for all HEIs

The categories covered by Additionality and 'Blended' (see Table 1), for the most represent part moves towards development of platforms/VLEs to support blended learning for campus-based students or a hybrid experience (with some elements fully online) for part-time students. These receive relatively few mentions overall (but note the divergence between university and IoTs responses discussed below; see Figures 4) and target setting appears to be the exception rather than the norm. It is possible to speculate about the underlying reasons for these results. It may be, for example, that HEIs regard such developments as

evolving incrementally from the bottom-up and therefore as being not relevant to or not enabling explicit reference in their Mission-based Performance Compacts.

Regarding **Inter-institutional** collaboration in course design and delivery, the gap between mentions (by 50% of HEIs) and explicit targets (31%) suggests an active but as yet undeveloped interest in this kind of activity. Elsewhere in the Compacts, commitments to the development of regional and/or thematic clusters are given prominence and universally refer to 'shared academic planning' as a core goal of the clusters. Shared academic planning, however, appears to be focused at this early stage on optimising the portfolio of undergraduate programmes offered within the clusters, eliminating duplication, and streamlining access transfer and progression arrangements in and between HEIs in the clusters. Progressing this shared academic planning agenda is likely to be a prerequisite to inter-institutional collaboration leading to joint design and delivery of programmes on any significant scale. It is not surprising therefore that expectations are tentative for the period covered by the current Compacts.

While some interest is expressed in online delivery of programmes to an **International** audience, target setting is confined to just three HEIs. At face value, this seems surprising, but may reflect the relatively high barrier (competences, organisational structure and costs) associated with successful entry to the international online education market.

Generic Student Suppport focuses on the wider range of learning and well-being supports that are provided for students and on opportunities to deploy digital platforms as a component of such services. Again, some interest is evident, but explicit targets are mentioned by only four HEIs. It is possible, or indeed likely, that general non-academic supports or those offered in learner support centres are conventionally seen as requiring the development of strong rapport and interpersonal connection with students, and are therefore regarded as being less amenable to online mediation. The potential to deploy digital platforms and resources to augment student support services appears to be relatively unexplored.

Staff to Support TEL (educational technologists) and the **TEL Infrastructure** receive little mention, and explicit targets are mentioned by no more than four HEIs in each case. This too seems surprising, given that a majority of HEIs are already providing some level of such support, up to and including 'Centres' in the larger institutions. This raises a question as to the role of such supports, whether they are primarily geared towards enabling small bottom-up initiatives, or whether more strategic objectives (including actions of scale) are to be pursued. Their relative absence from the Compacts suggests the former.

OER and **Learning Analytics** were included in the categories for analysis on the basis that they are both the subject of intense discourse and rapid development in higher education internationally. Neither topic features in the HEI Compacts. There is no doubt that academics and departments in a number of Irish HEIs are active in international research and development in these fields, but the strategic question of mainstream integration along with the ethical and pedagogical ramifications do not yet appear to have been considered.

Differences between HEI groups

Further analysis is possible by looking at differences between the universities (7), the institutes of technology (14) and other colleges (5). Figure 4 respectively shows how 'mentions' and 'explicit targets' are distributed between these three groupings, expressed as a percentage in each case of the total number of HEIs in the group.
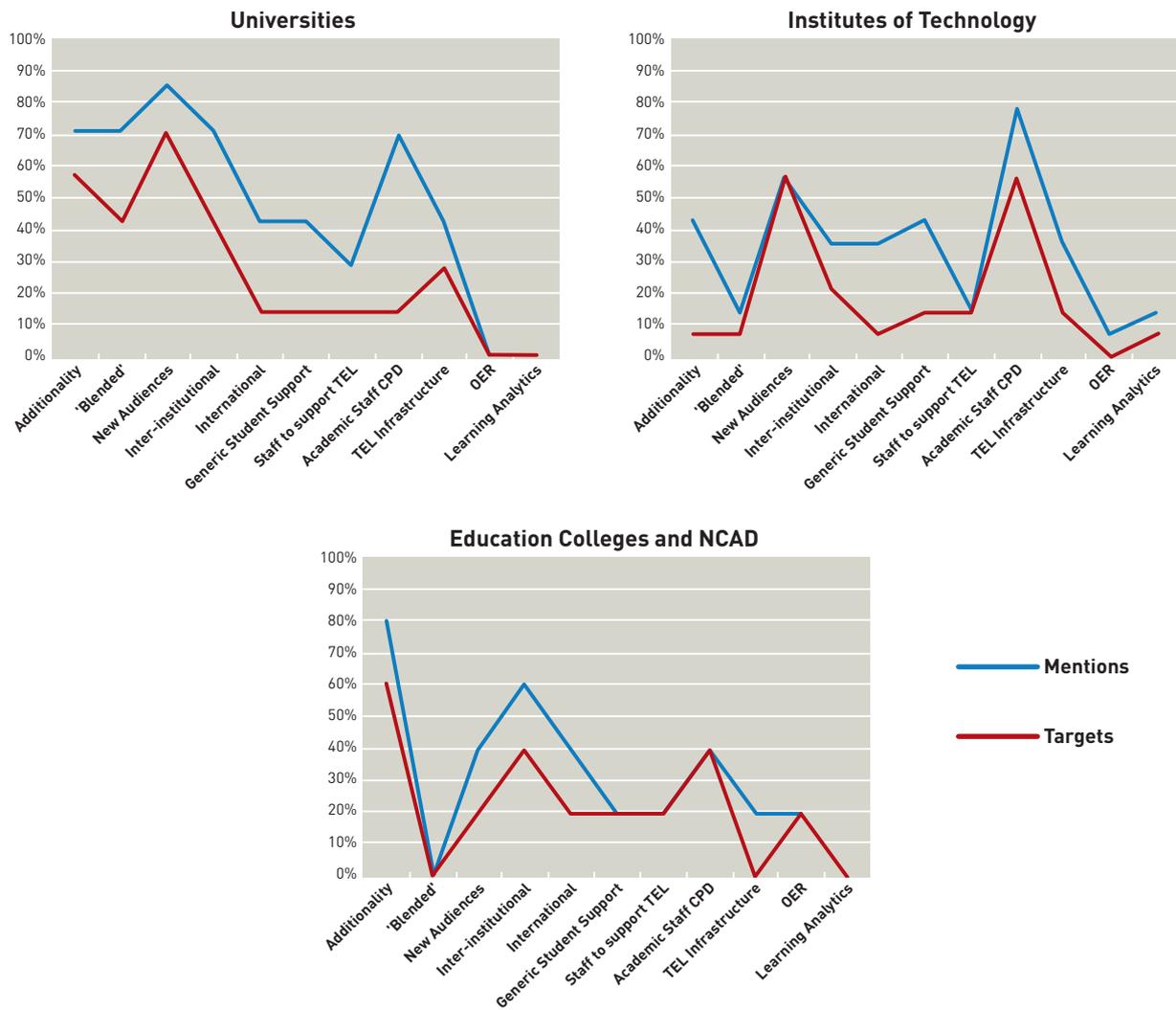

Figure 4. Mentions Compared with Targets

In general, university 'mentions' run ahead of those recorded for other groupings. The one exception to this is in the case of **Academic Staff CPD**, where IoTs mentions are marginally more frequent.

With the exception **Additionality and 'Blended'**, a broadly similar pattern of responses is evident for universities and IoTs, based on the shape of the graph showing that what is declared as important (or less important) appears to be consistent across these two groups. The pattern for the smaller group of five colleges is somewhat more diverse, but this is likely to be due to the smaller sample size and the mission diversity within that group comprising Colleges of Education and National College of Art and Design.

Additionality and 'Blended' present a particularly interesting picture. These categories represent progression from 'additionality' to 'extending/modifying the campus-based paradigm' (Table 2) or the incremental approaches (Figure 1) that reflect 'doing the same in the old way but better' to 'adding new things to old things and doing them in the old way' (Figure 1).

Universities and colleges are at the upper end of mentions for **Additionality** (71%) and this contrasts sharply with a lower representation by IoTs (40%). As regards **'Blended'**, universities are alone in having a high frequency of mentions. Mentions for IoTs are low (20%) and nil for colleges. When it comes to target setting for **Additionality and 'Blended'**, universities appear more confident in setting explicit targets (57% and 43% respectively). Other colleges share this confidence in Stage 1 (60%), but record no targets for Stage 2. IoTs responses record minimal targets for these two stages (7% in each case). The divergence between the three groups is remarkable and worthy of further investigation. Possible explanations include:

– Universities are conscious of a need to improve the campus experience and believe they have the capacity to do so. They are also confident of their ability to extend the campus-based paradigm and to develop greater flexibility for existing student cohorts.

– Colleges are also conscious of a need to improve the campus experience and believe they have the capacity to do so. They do not, however, attach priority to extending the campus-based paradigm.

– IoTs are operating in a relatively steady state, with a high number of class contact hours and academic staff contracts that are highly prescriptive in terms of teaching loads. The status quo already provides a highly supported learning environment and the rationale and/or scope for change is more limited for campus-based activities.

Concluding remarks: Mission-based Performance Compacts

Overall, this first cycle of Mission-based Performance Compacts presents a picture of a higher education sector adjusting to new strategic imperatives while at the same coping with unprecedented staffing and budgetary constraints. Institutional consolidation and clustering are dominant drivers of change with impacts expected in how academic programme portfolios are planned and delivered. **Digital capacity features in the Compacts as an important but as yet not fully defined enabler of such strategic change.**

A digital capacity 'roadmap' (as envisaged by the National Forum) implies the articulation of a known and desired outcome. The Compacts reveal that a 'road atlas' may be a more appropriate metaphor, indicating a multiplicity of possible strategic outcomes and a range of optimal routes to achieving them.

3.2.   Institutional Profiles — Projection to 2016

HEIs, in the context of their Mission-based Performance Compacts were also asked to project student numbers out to 2016 under three categories: full-time, part-time and remote. They were also requested to project the numbers of students engaged in flexible modes of study and to indicate what percentage of overall enrolments such students would comprise. Responses range from a low of 9% to a cluster in or around 27%, with one outlier projecting 37% of students engaged in 'flexible learning'.

Digital capacity is a key enabler of flexible learning generally. In particular, digital capacity is essential when programmes are to be delivered to cohorts whose attendance on campus is not a requirement. These students (online/distance education, or 'remote' to use the HEA terminology) are a particular sub-category of part-time students.

Figure 5 shows how individual HEIs describe their 'flexible' mix, based on the profile projection for 2016 included in their Mission-based Performance Compacts. The percentage in parentheses beside the name of each institution represents the percentage of their overall enrolment that comprises 'flexible learning' students. The chart then gives a breakdown of how the mix of 'flexible learning' students is divided between undergraduate studies and postgraduate studies and whether the relevant students are classified as part-time or 'remote'. It is clear that a majority of flexible learning opportunities are projected for postgraduate level.
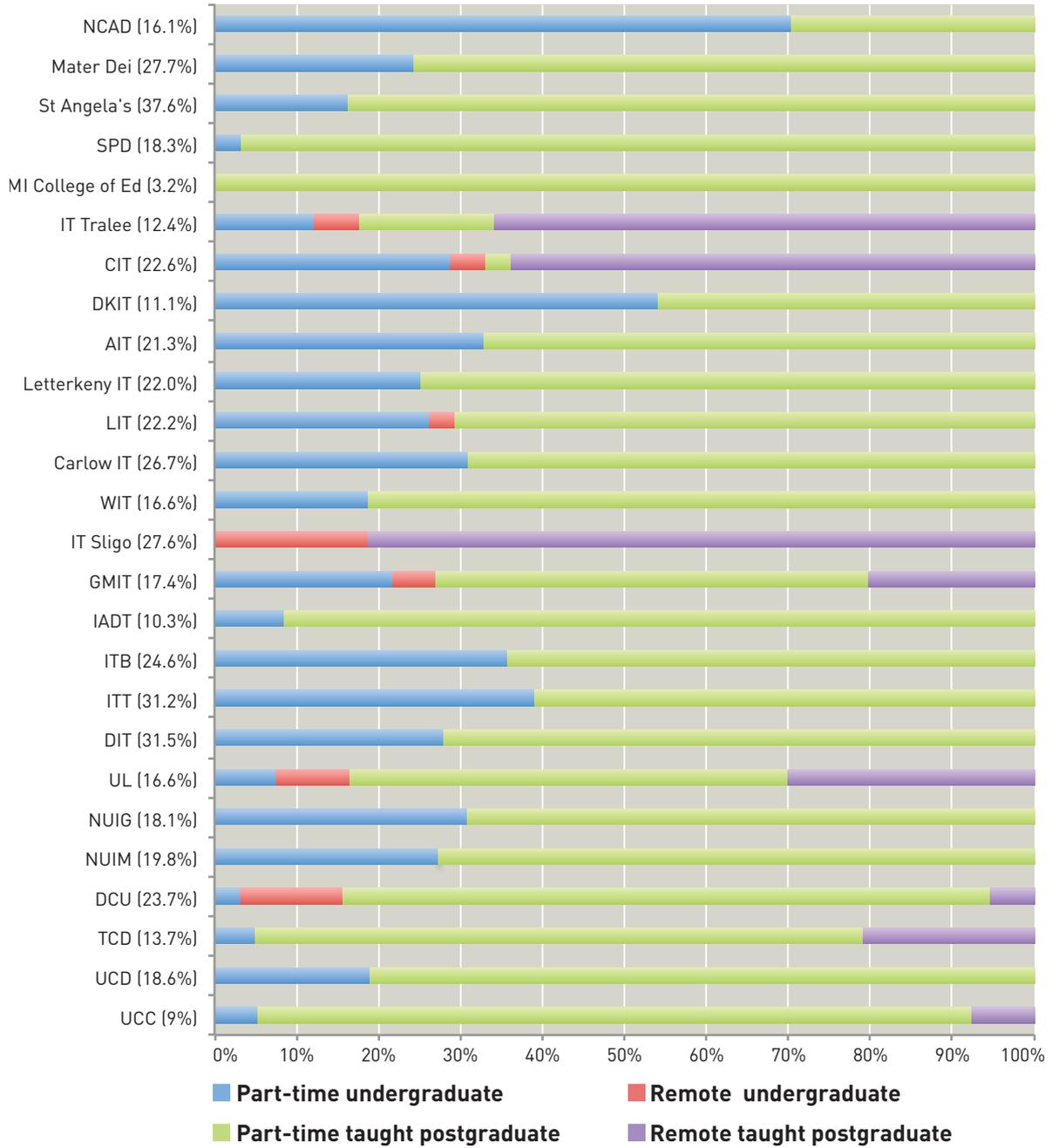
Figure 5. How HEIs Describe their 'Flexible' Mix

There appears to be some inconsistency in how institutions record (or project) 'part-time' and 'remote' student numbers. Many do not use the 'remote' category at all. This clearly points to anomalies in how such student categories are defined or understood, or to deficiencies in student record systems that are unable to differentiate the two. It may also be the case that the existing recurrent funding mechanism has the unintended effect of encouraging reporting of all 'flexible' students as 'part-time', since 'remote' students are less favourably treated in the funding model.

Concluding remarks: institutional profiles to 2016

As presented, the picture for Irish higher education is very unclear when it comes to flexible, online, distance education provision and implies levels of strategic uncertainty across the board. The true picture may be somewhat better, but this is not reflected in institutional profiles.

3.3.   Semi-structured Interviews

Semi-structured interviews with Registrars, also including in some cases academic managers involved in institution-wide learning support roles, provided a contrasting picture of the day-to-day reality of learning innovation in the context of oversight of academic quality and processes under severe pressure and resource constraint.

Emerging Themes:

– A strong level of support is evident for academic staff CPD and for the professionalisation of the teaching role of academic staff.

– Support is strong for collaborative actions on CPD mediated through the T&L Forum and also through the emerging regional clusters.

– Learning innovation using digital technologies is taking place and bottom-up innovations are facilitated; there is less evidence of strategic (top-down) initiatives at institutional level.

– There is some support for collaborative, inter-institutional course design and development as one logical outcome of regional clustering.

– There is broad agreement that matters related to digital or online learning and digital capacity generally ('new modes of teaching and learning') should be brought systematically into the mainstream of institutional quality assurance processes.

Referring to the semi-structured interview questions in Table 2, responses can be summarised as follows:

Aspirations for enhancing teaching and learning in an increasingly digital age

Much emphasis is placed on what was described as 'appropriate' integration of digital technologies. Current approaches are for the most part conservative ('doing the same in the old way but better') with an emphasis on shaping teaching and learning strategies to address the needs of more diverse student cohorts. Digital

capacity is seen as particularly relevant when considering how greater numbers of students can be catered for, especially those who are part-time, professional or non-traditional.

Also emphasised is the need to move beyond digital learning as an add-on to a point where it is fully integrated across the curriculum. In this regard, the establishment of regional clusters and Technical University alliances are seen as potential drivers of change in teaching and learning practices.

Concerns to be addressed in the drive towards enhancing teaching and learning

Three concerns are dominant.
– Sustainability: ability to fund on an ongoing basis the necessary expansion of ICT networks/services/platforms.
– Managing the expectations of the 'digital student', consistent with those identified in the 2014 JISC study[9], including for example ubiquitous connectivity, ability to mix the use their own devices with those provided by the institution, consistent use of a VLE and engagement with academic staff who are confident operating in a digital environment.
– Scalability: current staffing levels for essential support staff (e.g., educational technologists) are too low to allow for any step change in the level of digital learning integration or for the scaling up of already established pilots.

Some concern was also expressed about students' digital competence. Experience indicates that this cannot be assumed. Students' access to high speed broadband off campus cannot be assumed and this may be a constraining factor on what digital/online course-related activities they may be expected to pursue. In summary, there is as yet an insufficient evidence base to support our understanding of the 'digital student' in Irish higher education. We remain poorly informed in this regard.

VLEs/platforms for digital learning

Concern seems widespread about what is perceived as poor/limited use of VLEs (often used merely as repositories for basic content). At the very least, we appear to have a poor evidence base as to the extent and depth of usage of VLEs and this is seen to be an obstacle to good decision-making. Among those with direct experience of using VLEs, opinions were expressed that existing platforms are 'clunky' and not in tune with the digital experiences students expect and find when using social media platforms. A further concern, expressed by one Registrar, is that VLEs, used poorly, contribute to a persistence of 'transmission teaching' practices.

Poor interoperability of VLEs is also regarded as a potential obstacle to inter-institutional collaboration. Moodle and Blackboard are the platforms of choice, but they are licensed/configured at institutional level with differences in how they are rolled out locally. Opinions are sharply divided about whether a centralised VLE or other 'platform' is desirable. Larger institutions feel more confident in a go-it-alone strategy, but with some overarching portal at national level. Smaller institutions are somewhat more inclined to a centrally hosted/managed platform (while acknowledging the difficulties of migrating from their existing platforms). **All are agreed, however, on the need to address interoperability and that failure to do so will impact negatively on aspirations for inter-institutional/cross-campus collaboration**. HEANet was mentioned

9   Beetham, H. and White, D. (2013) Students' Expectations and Experiences of the Digital Environment: Preliminary Findings. JISC. http://repository.jisc.ac.uk/5572/1/JR0006_STUDENTS_EXPECTATIONS_EXEC_SUMMARY_v2.pdf.

as a potential player in delivering cross-campus solutions and IoTs are also familiar with centrally provided services through An Chéim.

Unclear (rather than divergent) views were expressed about repositories of digital content. The National Digital Learning Resources (NDLR) was referenced, but there appears to be no clear sense of what it has achieved or the extent to which the digital resources hosted by NDLR are being used. The role of a national repository versus international repositories for content (or learning objects) appears very unclear and there appears to be no coherent strategic perspective in this regard.

Significant challenges to building sustainable digital capacity

Concern was widely expressed about inbuilt rigidities in the system as a whole. These are often seen to drive institutional behaviours, but not in a way that supports flexibility for students or develops the aspirations for the diversity espoused in the National Strategy for HE. The way the funding model operates, for example the different treatment for part-time and distance education students is regarded as an obstacle.

Inflexibility in student registration systems and the inability to seamlessly exchange data between institutions are seen, in the short term, as an obstacle to greater collaboration and inter-institutional programme provision at scale. A unique, for-life, student ID was mentioned by a number of Registrars as a key enabler. Poor interoperability of the learning platforms deployed in individual institutions is also seen as a barrier to collaboration and progress.

Questions of organisational culture and change also become significant once there is an attempt to bring innovative practice into the mainstream. For example, ensuring consistency of the student experience within their institution/programme can be a problem in a *laissez-faire* context where some staff intensively develop digital approaches and others do not. Putting in place educational technology/learning design specialists in sufficient numbers is a real challenge, not just for reasons of cost or recruitment restrictions, but also because of the culture change at faculty level that is required to integrate their skills in support of course design and development. Furthermore, as more diverse pedagogical practices come into play, HR/staff contract issues arise and these must be dealt with – they cannot be ignored; this is a particular issue for IoTs where the academic staff contract is highly prescriptive (e.g., on inputs, class contact).

Meaningful actions that could be pursued at sectoral or regional cluster levels

Strong support is evident for inter-institutional programme development and delivery. A number of Registrars made reference to positive and sustainable experiences of collaboration under various Strategic Innovation Funding (SIF) projects.

There is also strong support for sector-led CPD, centred on enhancing learning design. Digital pedagogies and the associated digital skills development must be integrated into that wider context. There may be scope for a competence-based approach to accredited CPD for academic staff. Support is also evident for aspects of CPD that can be delivered online and there is a good case for recording and archiving some of the CPD activities that are organised originally as face-to-face sessions.

CPD related specifically to the design, development and delivery of courses in *fully online mode* was also identified as something best delivered at sector level.

The work of the National Forum appears to be widely supported and valued. The continuation of sectoral events/showcases is seen as highly desirable, but with a recommendation that more can be done through workshops to provide practical exemplars of what works and what does not. Identification of international good practice should also be a feature of the Forum's work.

Also required, and best addressed at sector level, is the benchmarking of practices in order to build the evidence base and cost models/business cases for different kinds of digitally supported pedagogical practices. The outcomes of such work should be documented and archived at sector level, including guidelines, survey templates and other instruments that could be used by individual institutions.

Meaningful actions that could be pursued at institutional level

There is strong agreement that academic quality assurance processes (course validations, departmental reviews, institutional reviews) provide a real opportunity for setting the agenda for 'new modes of teaching and learning'. There is also agreement that institutional strategy development should include consideration of new modes of teaching and learning, while ensuring that 'digital' is in its appropriate context and not perceived as an end in itself.

Registrars agree that HEIs tend to rely on a strategy that supports bottom-up initiatives. The roles of 'champions' and 'educational technologists' are widely understood and supported, but there is a realisation that the time has come to move beyond current boundaries, albeit that this means advocating for more resources, creating stronger collaborative structures and extending educational technologists' roles in order to support and sustain initiatives of greater scale and impact.

Significant other remarks

There is wide agreement that clarity is urgently needed about the vision and goals for digital learning in higher education nationally. Current initiatives are regarded as fragmented, piecemeal and often unsustainable. At an even more practical level, Registrars are aware of confusion that arises from the use/misuse of terminology associated with the field, and an agreed taxonomy of terminology and practices is seen as an urgent requirement.

4. Compacts and Semi-structured Interviews: Comparing the Messages

A clear message from the analysis of Compacts and the semi-structured interviews with Registrars is that capacity to engage in actions with a transformative effect on teaching is seriously constrained. Yet, there is an acknowledgement that at the very least incremental enhancement is an urgent priority. To borrow again from the model in Figure 2, getting to the point of 'adding new things to old things and doing them in the old way' would represent a pragmatic response to maintaining quality and standards under severe resource pressures. Moving along the transformation axis towards 'doing completely different things in some new ways' (or 'in completely new ways') does not yet appear to be considered as a realistic option for the majority.

> **The two points of major alignment between Compacts and interviews are:**
> – **Intensification of CPD for academic staff is critical and it can best be undertaken through a collaborative approach.**
> – **The thrust towards 'flexible' learning and the changes envisaged in institutional profiles will be visible for the most part in off-campus/online professional or postgraduate education.**

The interviews augment the information/commitments documented in the Compacts by providing important insights into bottlenecks and in some cases by raising serious concerns about the current state of play, for example:

- By drawing attention to a serious lack of baseline data on what exactly constitutes digital learning design and practice in our HEIs;
- Pointing out that without a significant uplift in the number of support staff (educational technologists, learning design specialists), confidence about the ability to mainstream new modes of teaching and learning will be undermined;
- Highlighting weaknesses in existing systems (student registration systems and VLE platforms) in that they are inflexible to the point of being a hindrance to inter-institutional collaboration and provision of improved choice to students.

What is evident from both Compacts and interviews is that digital strategies (for design, development and delivery of academic programmes) are partial and fragmented. They still reside very much at the level of pilot initiatives, often at module level. Innovation or change initiatives that embrace digital technology at programme or departmental levels are not common. Alignment with overall institutional, regional or national strategies for higher education is still weak. While bottom-up approaches are strong, their ability to impact on the mainstream remains limited.

5. A European Context for Digital Learning

The situation as it currently stands in Ireland can be compared with that in other European countries, having regard to the recent report on *E-Learning in European Higher Education Institutions*[10]. This report provides an analysis of strategies and practice, based on 239 survey responses from universities in 37 countries (including four responses from Irish Universities). A number of findings are important from a leadership perspective, insofar as they shed light on national and institutional strategies, quality assurance, support for the development of digital learning environments and rationale for embedding digital learning in its various forms:[11]

– *A quarter of respondents stated that their countries have developed a national policy or strategy for e-learning, either specifically for higher education (16%), or for education in general (9%). In addition, 17% of respondents reported that the introduction of a nation-wide e-learning strategy is under discussion … [but] respondents from the same country differed in their judgment on whether national strategies for e-learning in general existed and were relevant to higher education (p.20).*
– *Seven countries (including Ireland) report that national level support measures are in place to support e-learning (p.21).*

At an institutional level the EUA report identifies a clear trend towards shared responsibility between central institutional functions and faculty-led activities for e-learning. There is a shift from 'faculty- and teacher-driven activities to institutional strategies initiated by their leaders' (p.40).

– The vast majority of respondent institutions (89%) have an institutional or faculty-level strategy (for e-learning), or are currently preparing one … [However] only 42% of small institutions (0–7,499 students) have a strategy for e-learning compared to 74% of very large ones (over 49,999 students) (p.22).
– Online course and programme provision at most institutions is a response to general pressure for more flexible provision, as it often targets several very specific groups in various disciplinary areas and professional sectors. However, flexible provision for employed students and professional learners is clearly a high priority (p.30).
– Overall, 75% of survey respondents reported that e-learning is either managed by a central unit (35%), or as part of task-sharing with faculty-based units (40%) (p.39).
– Only 29% of respondent institutions have internal quality assurance procedures that pay special attention to e-learning, although 35% are considering them. Similarly, while only 23% of respondents state that their external QA agencies have established special requirements for e-learning, another 28% say that this issue is under discussion (p.42).
– There is substantial agreement among respondents that e-learning **changes the approach to teaching and learning** (77%), but also that **it takes time to introduce** (76%) (p.44).

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10 Gaebel, M., Kuprivanova, V., Morais, R. and Colucci, E. (2014). *E-Learning in European Higher Education Institutions: Results of a Mapping Survey Conducted in October–December 2013*. European University Association (EUA). http://eua.be/Libraries/Publication/e-learning_survey.sflb.ashx.
11 Note that the EUA report uses the term e-learning as 'a generic expression for all learning involving the use of information and communication technologies (ICT) to support both learning and teaching' (p. 17). Many regard e-learning as a somewhat dated term, with the same generic context now being conveyed by the term 'digital learning'.

In turn, European universities, as indicated by the EUA survey, for the most part appear to have a less developed strategic perspective on digital learning than that reported in the USA, where for example the Babson Survey of online higher education in 2014[12] records that 33.5% of higher education students already take at least one course fully online and Chief Academic Officers forecast this will grow to 90% within five years. Some 66% of academic leaders also report that online learning is critical to long-term strategy.

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12   Allen, I.E. and Seaman, J. (2014) *Grade Change: Tracking Online Education in the United States.* Babson Survey Research Group and Quahog Research Group LLC. http://www.onlinelearningsurvey.com/reports/gradechange.pdf.

6. Conclusion and Focusing Questions for Institutional and Academic Leaders

Incremental building of digital capacity (for academic programme design, delivery, support and assessment) within the higher education system in Ireland and within individual HEIs is a work in progress, and both the Compacts and the interviews with Registrars indicate a supportive leadership stance. Articulating a wider strategic purpose for digital capacity building, however, appears to be severely constrained by current demographic and resource challenges that limit transformative developments while seeking to cope with intense pressure on traditional undergraduate campus-based provision.

Unlike the systematic processes already in place for building national and institutional research capacity, there are as yet few metrics and only a poor understanding of the impacts that could be anticipated if systematic efforts were to be made to achieve digital capacity at scale. It appears that we are not yet at a point where building digital capacity can be strongly aligned with specific elements of the National Strategy for Higher Education.

From a leadership perspective, proposals for building digital capacity, in development under the aegis of the National Forum, provide an opportunity to strike the appropriate balance between top-down and bottom-up initiatives, and to set tangible goals for a modernised digitally enabled HE system nationally. One approach that should be considered is the articulation of 'focusing questions' to be addressed by a leadership working group led by and animated by the National Forum for the Enhancement of Teaching and Learning. Questions may include:

Strategic

– National vision/strategy for digital learning: identifying targets and metrics

– The role of system led organisations in underscoring modernisation of HE

– Institutional Compacts: a template for the modernisation agenda

Operational – with an overarching national imperative

– Mapping CPD for academic staff: an outcomes based approach

– External evaluation: What have we learned so far from teaching and learning enhancement initiatives?

– Open education resources: national policy/enabling environment (having regard to the international context) to support OER content development and practices to promote integration within academic programmes

– Enabling digital and information systems infrastructure (connectivity, learning platforms, student record systems, analytics): identifying the conditions for seamless inter-institutional operation

Notwithstanding resource constraints, Ireland is relatively well placed to take a strategic position on digital learning in higher education. The support of academic leaders for a process of further dialogue is evident, and this should find expression in the implementation of the Digital Capacity Framework.

Appendix 1

Compendium of Terminology – a Guide to Reading Compacts

Blended Learning
Continuing Professional Development (CPD)
Digital Learning
Digital Resources
Digital Pedagogy
Distance Education
e-Learning
e-Portfolio
Enhancement of Student Experience
Flexible Learning
Hybrid Learning/Courses
Joint Courses
Learning
MOOCs
Online Learning
Open Resources or Open Education Resources (OER)
Platform
Quality Enhancement
Retention
Teaching
Technology Enhanced Learning (TEL)
Virtual Learning Environment (VLE)

Appendix 2

Tables for 'Mentions' and 'Explicit Targets'

Mentions	Univ (7)	As percentage	IoTs (14)	As percentage	Other (5)	Total (26)	As percentage
Additionality	5	71%	6	43%	4	15	58%
'Blended'	5	71%	2	14%	0	7	27%
New Audiences	6	86%	8	57%	2	16	62%
Inter-institutional	5	71%	5	36%	3	13	50%
International	3	43%	5	36%	2	10	38%
Generic Student Support	3	43%	6	43%	1	10	38%
Staff to support TEL	2	29%	2	14%	1	5	19%
Academic Staff CPD	5	71%	11	79%	2	18	69%
TEL Infrastructure	3	43%	5	36%	1	9	35%
OER	0	0%	1	7%	1	2	8%
Learning Analytics	0	0%	2	14%	0	2	8%
Other	3	43%	10	71%	2	15	58%

Explicit Targets	Univ (7)	As percentage	IoTs (14)	As percentage	Other (5)	Total (26)	As percentage
Additionality	4	57%	1	7%	3	8	31%
'Blended'	3	43%	1	7%	0	4	15%
New Audiences	5	71%	8	57%	1	14	54%
Inter-institutional	3	43%	3	21%	2	8	31%
International	1	14%	1	7%	1	3	12%
Generic Student Support	1	14%	2	14%	1	4	15%
Staff to support TEL	1	14%	2	14%	1	4	15%
Academic Staff CPD	1	14%	8	57%	2	11	42%
TEL Infrastructure	2	29%	2	14%	0	4	15%
OER	0	0%	0	0%	1	1	4%
Learning Analytics	0	0%	1	7%	0	1	4%

Appendix 3

List of 26 Higher Education Institutions whose Mission-based Performance Compacts Were Included in the Analysis

Universities

Dublin City University
Maynooth University
NUI Galway
Trinity College Dublin
University College Cork
University College Dublin
University of Limerick

Institutes of Technology

Athlone Institute of Technology
Blanchardstown Institute of Technology
Carlow Institute of Technology
Cork Institute of Technology
Dublin Institute of Technology
Dun Laoghaire Institute of Art, Design and Technology
Dundalk Institute of Technology
Galway-Mayo Institute of Technology
Institute of Technology Sligo
Institute of Technology Tallaght
Institute of Technology Tralee
Letterkenny Institute of Technology
Limerick Institute of Technology
Waterford Institute of Technology

Colleges

Mary Immaculate College of Education
Mater Dei College of Education
National College of Art and Design
St Angela's College Sligo
St Patrick's Drumcondra

Appendix 4

Persons/Institutions (24) Consulted through Semi-structured Interviews

Universities:

Dr Eithne Guilfoyle	Dublin City University
Prof. Aidan Mulkeen	Maynooth University
Dr Iain McLaren	NUI Galway
Prof. Patrick Geoghegan	Trinity College Dublin
Prof. Paul Giller, Dr Bettie Higgs	University College Cork
Prof. Mark Rogers	University College Dublin
Dr Pat Phelan, Ian McKenzie	University of Limerick

Institutes of Technology:

Dr Joe Ryan	Athlone Institute of Technology
Richard Gallery	Blanchardstown Institute of Technology
David Denieffe	Carlow Institute of Technology
Dr Michael Mulvey	Dublin Institute of Technology
Dr Marian O'Sullivan	Dun Laoghaire Institute of Art, Design and Technology
Ann Campbell	Dundalk Institute of Technology
Michael Hannon	Galway-Mayo Institute of Technology
Dr Brendan McCormack	Institute of Technology Sligo
John Vickery	Institute of Technology Tallaght
Dr Michael Hall	Institute of Technology Tralee
Terry Twomey	Limerick Institute of Technology
Dr Derek O'Byrne	Waterford Institute of Technology

Colleges:

Naomi Jackson	Hibernia College
Dr Eugene Wall	Mary Immaculate College of Education
Prof. Hannah McGee	Royal College of Surgeons in Ireland
Declan Courell	St Angela's College of Education
Ian McKenna	St Nicholas Montessori College