Invested in excellence: evaluating the impact of internal funding on pedagogical development and collaboration in higher education

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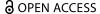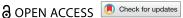
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ABSTRACT

This study explores the impact of internal funding on the development of scholarship in learning and teaching within a post-92 Scottish higher education institution. Employing a qualitative survey approach, this research engaged sixteen principal investigators from internally funded learning and teaching projects to understand how such funding influences academic practices. Through thematic analysis, four key themes emerged: enhancement of pedagogical skills, fostering of interdisciplinary collaboration, administrative challenges, and the integration of students as partners. The findings illustrate that internal funding significantly bolsters pedagogical capabilities, facilitating the adoption of innovative teaching strategies and nurturing broader academic collaborations. Based on these insights, the paper suggests three strategic recommendations for enhancing the efficacy of funding processes: refining support for project management, simplifying administrative procedures, and strengthening frameworks for student involvement in projects. These recommendations aim to optimise the benefits of internal funding, so that it better supports educational advancements in higher education.

Introduction

Internal funding within higher education institutions can play an important role in the growth and enhancement of teaching and learning scholarship (Kivistö and Mathies 2023). Indeed, given the relative scarcity of external funding for pedagogical initiatives, internal financial resources are often essential for fostering innovation and continuous improvement in educational practices (Frølich, Kalpazidou Schmidt, and Rosa 2010).

By controlling and directing internal funds, universities can align their financial resources with their strategic goals, promoting a cohesive and focused approach to educational development and excellence. Furthermore, the literature emphasises the importance of aligning funding strategies with institutional goals to maximise their effectiveness, particularly in teaching-focused universities where the integration of research and teaching can sometimes be less pronounced than in research-intensive environments (Elen, Lindblom-Ylänne, and Clement 2007; Mathies and Ferland 2022; Sharpe 2018).

Yet, despite the potential significance of internal grants in bolstering educational practices, there is a relative scarcity of studies focusing on their impact in relation to staff development. This gap is notable given the unique opportunities internal funding presents for fostering academic growth and professional development among university staff, which in turn can lead to improved student outcomes and institutional success (Botham 2018).

This study explores how such funding mechanisms influence academic development by examining the internal learning and teaching funding in the form of Strategic Enhancement Projects (SEPs) over a three-year period at Edinburgh Napier University, a post-92 Scottish university (post-92 universities in the UK are institutions that were granted university status following the Further and Higher Education Act of 1992). While the research is based on a single institution, which may limit the generalisability of the findings, it offers valuable insights that can guide policymakers and administrators across similar institutions both in the UK and globally. The challenges and opportunities identified are relevant to higher education institutions worldwide, where internal funding plays a crucial role in advancing pedagogical development and fostering collaboration.

Over the past three years, 24 SEPs at Edinburgh Napier University have actively involved students as partners, engaging over 60 staff from both academic and professional services. This inclusive approach has led to a variety of projects, such as developing academic integrity resources and innovative assessment

methods. For example, one project created a video introduction to academic integrity, with students participating in filming and editing, which enhanced new student engagement. Another project examined assessment and feedback practices, producing a 'Route Map of Assessment Design' tool to foster a sense of community and belonging. These initiatives have addressed immediate educational needs and provided valuable long-term resources for improving teaching and learning practices.

A key feature of the SEPs is their emphasis on producing high-quality research recognised beyond the university. Recipients have published in top-tier journals, presented at national and international conferences, and contributed to policy reports, demonstrating some of the impact of the SEPs. Collaborations with organisations such as the Quality Assurance Agency (QAA) and Advance HE have further amplified the university's pedagogical advancements. Additionally, these projects have led to positive changes in practice and policy within the university itself.

Research on internal funding typically highlights its role in facilitating academic research and innovation, yet there is a lack of detailed understanding of how such investments support pedagogical scholarship (Feixas, Martínez-Usarralde, and López-Martín 2018; Moyo and McKenna 2021). This study aims to address this gap by providing empirical insights into how internal funding enhances pedagogical practices and academic staff development. The central research question guiding this investigation is:

How does internal funding help develop scholarship in learning and teaching across an institution?

This question arises from the need to elucidate the specific benefits and outcomes of financial investments in pedagogical projects, as opposed to more generalised research funding (Guerra and Costa 2021). In addressing this question we therefore hope to provide a better understanding of the transformative potential of targeted funding in enhancing pedagogical practices and supporting scholarly community building within a higher education institute.

In addition to filling a significant gap in current research, this paper offers practical insights that may guide administrators and policymakers in optimising funding strategies to support educational improvements and staff development. Such insights are important for institutions seeking to enhance their educational impact and foster a culture of continuous improvement in teaching and learning. The findings of this study are expected to resonate widely, not just within the Scottish higher education sector but also across the broader landscape of global higher education, where similar funding mechanisms are employed to various ends. The insights garnered here could inform broader strategic enhancements across similar institutions worldwide.

By detailing the mechanisms through which internal funding can serve as a catalyst for scholarly innovation in teaching and learning, this study contributes to a deeper understanding of the strategic deployment of resources in education. It responds to calls for more targeted research into the specific impacts of funding within individual institutions (El Gibari et al. 2021; Ortagus et al. 2020; Shah 2012). In doing so this research seeks to highlight the role of internal funding in cultivating a supportive environment to guide both educational improvements and staff development.

Materials and methods

The epistemological stance of this study is rooted in interpretivism, acknowledging that reality is constructed by human experiences and interactions. This perspective is particularly relevant to the exploration of the impact of internal funding on academic practices, where personal and collective perceptions significantly shape the outcomes. The theoretical framework guiding this inquiry draws upon socio-constructivist principles, emphasising the role of social contexts and interactions in the development of knowledge. This approach allows for a nuanced understanding of how internal funding influences both individual capacity building and also the collaborative and communal aspects of academic work within a higher education institute.

To investigate the influence of internal funding on academic development, a survey was conducted targeting the Principal Investigators (PIs) of the 24 SEPs funded over the three-year period of this study. This approach was chosen because PIs are responsible for the design, implementation, and outcomes of the projects. By focusing on PIs, the survey aimed to gather qualitative insights that reveal both individual and collective academic advancements, as PIs have the most direct knowledge of the project's objectives, challenges, and achievements.

The survey maintained full anonymity to encourage openness and honesty among participants, aligning with ethical research practices. Informed consent was ensured, providing participants with clear information about the study's aims, the anonymised nature of the data collection, and their rights, including the option to withdraw at any time. This process adhered to the university's Education Research & Integrity Committee's ethical standards, which approved the study.

Direct emails invited 24 principal investigators to participate, with 16 completing the survey. This group included both teaching staff and professional service staff, providing broad representation of experiences and perspectives on the impact of internal funding.

The survey comprised seven compulsory open-ended questions designed to elicit detailed responses,

as well as an eighth open-ended question asking them if they had any further questions or comments that they would like to make. Participants were asked to reflect on their personal development, collaboration experiences, and the challenges they faced. These were the only questions included in the survey, which had an average completion time of 14 min and 31 s. The seven compulsory survey questions were as follows:

(1) How has the funding contributed to your personal development in terms of skills, knowledge, and professional growth?
(2) In what ways has the project, supported by internal funding, contributed to collective scholarship within your school, department, or the university as a whole?
(3) Did the funding facilitate new collaborations, partnerships, or networking opportunities? Please elaborate.
(4) What challenges did you face while implementing the project, and how did internal funding help address these challenges?
(5) Based on your experience, what improvements would you recommend for the Strategic Enhancement Projects funding process?
(6) Specifically, how has the project influenced teaching and learning practices within your context?
(7) What message or feedback would you like to convey to the university administration regarding internal funding and its impact on scholarly activities?

These questions were designed to gather detailed feedback on the effects of internal funding on individual professional development and its impact on educational practices and collaboration within the institution. Each question focused on identifying specific benefits and challenges associated with the funding, aiming to provide a clear understanding of its effectiveness.

Responses to these questions were analysed using thematic analysis, a well-established method in qualitative research for systematically examining data and identifying recurring patterns and significant themes. This process involves several steps: familiarising oneself with the data, generating initial codes, searching for themes, reviewing and refining these themes, defining and naming the themes, and writing up the findings (Braun and Clarke 2006).

First, all survey responses were read multiple times to gain a thorough understanding of the data. Next, initial codes were generated by highlighting significant phrases or sentences that appeared relevant to the research question. These codes were then reviewed and grouped into potential themes based on their similarities and differences. These themes

Table 1. Thematic analysis of survey responses. The table categorises the survey responses from principal investigators into four key themes. Each theme is presented with its corresponding initial codes, which highlight specific aspects of how internal funding impacts academic and educational practices.

Theme	Description	Initial Codes
Enhancement of pedagogical skills and knowledge	Development of skills and knowledge that enhance teaching practices and personal academic growth	Learning new research methods, Applying data collection methods, Navigating ethical approval processes, Feedback and assessment insights, Impact on module planning and delivery, Developing inclusive approaches, Insights into student belonging
Fostering collaboration and community engagement	Building connections and collaborative efforts within the academic and professional community	Collaborative project experiences, Working with different departments, Sharing findings, Influence on institutional policy, Academic dissemination
Challenges and strategic improvement	Identifying and addressing obstacles to improve processes and strategies for future projects	Challenges in student engagement, Incentivising student participation, Ethical approval challenges, Recruitment challenges for student researchers, Administrative challenges
Students as partners	Involving students as active contributors and collaborators in research and educational projects	Engaging student consultants, Student involvement, Feedback from students, Student partners

were clearly defined and named to encapsulate their essence, as shown in Table 1, and then further reviewed to make sure that they accurately represented the data.

The analysis resulted in the identification of four broad themes, which are discussed in detail in the Results section. These themes reflect the participants' experiences and perspectives on the impact of internal funding on their professional development, educational practices, collaboration, and the challenges faced during project implementation.

Results

Through the thematic analysis of the survey data, four key themes emerged, each exploring different aspects of the impact of internal funding.

Theme 1: enhancement of pedagogical skills and knowledge

The strategic allocation of internal funding has substantively contributed to the enhancement of

pedagogical skills and knowledge among academic staff. This theme, emerging strongly from the survey data, highlights the pivotal role that internal funding plays in enabling educators to explore and adopt innovative teaching methodologies and to integrate fresh research insights into their pedagogical practice.

Participant 1's experience is illustrative of this theme. They reported that they were 'able to learn about and apply a new research method of data collection, appropriate for students'. This encapsulates the broader sentiment that internal funding not only supports the acquisition of new skills but also facilitates their immediate application, thereby enhancing the educational experience for both staff and students. Similar sentiments were echoed by Participant 4, who noted that:

> My focus is more clearly on supporting assessment, feedback and skills within the student cohorts that I teach. What I have learned through the project supports this and will continue to support this.

Further supporting this theme, Participant 3 highlighted their development in 'knowledge in budget management and applying for ethical approval via Worktribe [the cloud-based software platform for higher education research that is used at our institute]'. This statement points to the broader educational impact of internal funding – beyond immediate teaching enhancements, it also builds key administrative competencies that are essential for the effective management of projects and resources within higher education settings. This dual enhancement of pedagogical and administrative skills is critical in the context of post-92 institutions, where such comprehensive development opportunities can be particularly valuable (Mughal, Ross, and Fearon 2017; Wakeham and Garfield 2005).

The professional growth facilitated by these projects extends beyond individual capabilities, influencing broader educational practices within institutions. As Participant 5 describes 'being able to pay a student partner meant that the project actually happened'. Moreover, Participant 2's experience reflects the role of internal funding in bridging theory and practice: 'This was an important experience of working with a funded project, getting to know some of the processes and departments involved in developing work in this context'. Here, the funding acts not just as a financial resource but as a catalyst for deeper institutional engagement and understanding, fostering a richer integration of operational knowledge with academic teaching practices.

These examples collectively highlight the significant impact of internal funding on enhancing pedagogical skills and knowledge within higher education. By enabling staff to acquire and apply new skills, engage in meaningful administrative roles, and

integrate innovative practices, internal funding supports a dynamic educational environment conducive to both teacher and student growth. This is in alignment with other studies that emphasise the importance of ongoing professional development in higher education to adapt to evolving educational demands (see e.g. Guàrdia et al. 2021; Holmes 2020; Law 2015).

Theme 2: fostering collaboration and community engagement

Internal funding within the university has significantly enhanced collaboration and community engagement, fostering deeper connections across disciplines and with students. This theme reflects a central aspect of the impact of the funding, highlighting its role in building a more interconnected academic environment.

Participant 13 emphasises the importance of collaboration:

> I collaborated with a colleague I had never worked with before, and we fed off our respective interests and experiences. We […] enjoyed interacting with researchers on similarly funded projects.

This example illustrates how internal funding encourages interdisciplinary partnerships and shared scholarly pursuits.

In the experience of Participant 12, the project allowed them to 'attend networking sessions run by [the Department that administered these grants] and to meet colleagues in other schools working on similar projects and initiatives'. This networking is useful for the dissemination of innovative ideas and practices across the university, fostering a culture of collaboration that extends beyond individual departments. Participant 9 also highlights the role of internal funding in enabling cross-departmental collaboration, noting that:

> Several sub-projects have involved working partnering with new teams across the University, which had been both a rewarding and effective experience. The 'student telethon' – which required input from lots of different areas within the School, its students, Wellbeing & Inclusion, Student Futures, the People Team, Governance and Information Services – is a great example of this.

This approach enriches the academic experience while enabling diverse range of student perspectives is incorporated into university decision-making processes, enhancing the relevance and impact of educational policies and practices (McStravock 2023).

Further, Participant 11 discusses the interdisciplinary nature of funded projects:

> The funding enabled a partnership and collaboration across three professional services teams, who do work together in certain capacities already, but the project has strengthened these connections and allowed for

concrete evidence and outputs to evidence collaboration and partnership across these teams.

This statement points to the broad scope of collaboration that internal funding can facilitate, breaking down silos within the university and fostering a more holistic approach to education and research (Kivistö and Mathies 2023).

These instances of enhanced collaboration and community engagement demonstrate the transformative potential of internal funding in creating a dynamic and interconnected academic environment. Such initiatives can support the development of individual scholars and students while contributing to the evolution of the university's educational landscape, promoting a culture of collaborative innovation that is crucial for addressing complex modern educational challenges (Azorín and Fullan 2022).

Theme 3: challenges and strategic improvement

The analysis also revealed a significant theme regarding the challenges faced by project participants and the strategic improvements suggested to enhance the funding process. This theme highlights both the practical difficulties encountered during project implementation and the potential areas for policy and process refinement within the university's internal funding mechanisms.

Participant 7's reflection captures the essence of this theme: 'Preparing for the project has been useful; however, getting students to engage has been a challenge'. This statement points to the practical challenges involved in such collaborative efforts. Participant 6 reflects further on these challenges by noting, 'A significant challenge we faced was that of student engagement and relatively low attendance'. This comment highlights a recurrent issue across many educational initiatives, pointing to the need for strategies that more effectively motivate and engage student participants. This insight suggests that while funding provides the necessary resources, it alone is not sufficient to guarantee the success of engagement efforts.

Participant 8 adds another dimension to the discussion of challenges:

The main challenges were related to university and other systems. Getting through ethical approval and completing the related forms takes a considerable amount of time, effort, and 'hoop jumping'.

This administrative burden can detract from the primary educational goals of funded projects, indicating a need for streamlining processes to reduce bureaucratic obstacles.

The feedback from Participant 14 also points towards a need for more consistent support throughout the project lifecycle:

The challenge was the level of engagement from the different staff has been variable and it was difficult as academics to find time to undertake the research.

This response demonstrates the importance of ongoing support and perhaps more flexible time allocations for staff involved in internally funded projects, suggesting that internal funding policies could be adjusted to accommodate the diverse time demands on academic staff. Strategic improvements are also suggested by Participant 11, who advocates for clearer guidance on project management within the funding framework:

More support after funding has been allocated, particularly for professional services colleagues who may be doing fewer research projects within their daily work.

This recommendation highlights the need for tailored support structures that address the specific challenges faced by various staff segments within the university.

Participant 9 offers a solution to enhance the project execution phase:

It would be good to have clearer reporting on spend/budget/etc. I'm not really sure whose responsibility this is/should be. […] But some more guidance on this at the outset would be useful for others in the future, I'm sure.

This feedback points to a common area of confusion in funded projects, suggesting that more explicit guidelines on financial management and reporting could improve project transparency and accountability (Hicks 2012).

These reflections reveal the multifaceted challenges encountered by PIs and participants, suggesting that while internal funding significantly contributes to pedagogical and scholarly advancements, there remains substantial scope for enhancing the structural and administrative aspects of funding programmes. Addressing these challenges through strategic improvements could further empower participants to maximise the benefits of internal funding, ultimately enriching the academic and educational landscape of the institution.

Theme 4: students as partners

A particularly salient theme from the survey data is the role of students as active partners in funded projects. This partnership both enhances the students' educational experiences and also contributes significantly to the quality and relevance of the projects themselves. The engagement of students as co-researchers and collaborators represents a progressive shift in pedagogical approaches, fostering a more inclusive and participatory academic environment.

Participant 10 vividly illustrates this partnership, stating:

The funded project drove the need for genuine student-staff partnership with a student intern recruited to support and help shape the project.

This approach provides students with practical experience and enables their perspectives and insights to directly inform project outcomes, enhancing the applicability and impact of the research (Johnston and Ryan 2022).

Participant 5 describes how internal funding facilitated significant student involvement:

> Has established collaborative, inter-departmental student partnership as a valid pedagogy at [our institution].

Such partnerships are vital for developing students' professional skills and integrating their unique viewpoints into academic research and project development, thereby enriching the learning and research environment (Mercer-Mapstone et al. 2017).

Furthermore, Participant 15 notes the transformative impact of these partnerships, observing that they:

> Enabled me to undertake student partnership work and develop an inclusive approach that is shared with the university community.

This comment underscores the dual benefit of student partnerships, which enhance both student learning and institutional teaching practices, fostering a collaborative atmosphere that is beneficial to all stakeholders involved (Matthews 2018).

However, integrating students as partners is not without challenges. Participant 8 highlights difficulties related to administrative processes and engagement: 'getting participants was a huge challenge that took more than money to overcome'. These challenges suggest the need for better support systems and clearer guidelines to facilitate effective student engagement in projects. These observations also point to the need for enhanced administrative clarity to better support student involvement in funded projects, meaning that their contributions are not hindered by procedural inefficiencies.

The theme of students as partners highlights a critical evolution in the educational approach within higher education, emphasising the importance of student engagement not just as learners but as active contributors to the academic community. This shift enhances students' educational outcomes and also contributes to a more dynamic and collaborative academic culture, which is needed for the continuous development of teaching and learning practices (Guàrdia et al. 2021).

Discussion

The study aimed to explore how internal funding at a post-92 Scottish higher education institution supports the development of scholarship in learning and teaching. Findings from the survey suggest that despite some strategic challenges that need to be overcome, internal funding significantly enhances pedagogical skills, fosters collaboration, and effectively integrates students as partners in academic projects. These outcomes collectively enrich the academic environment, making a compelling case for the continued and expanded use of internal funding mechanisms.

The enhancement of pedagogical skills and knowledge is evidently one of the most direct impacts of internal funding. Through such funding, educators can both adopt new teaching techniques and also engage in scholarly activities that bridge the gap between theory and practice. To build on this success, universities should consider creating more targeted funding opportunities that explicitly aim to develop specific teaching competencies and innovative educational practices.

In terms of collaboration, the funding has proven to be a catalyst for interdisciplinary work and for forging partnerships beyond traditional academic boundaries. This is crucial in a landscape where higher education increasingly demands flexibility and innovative problem-solving. Universities could enhance these outcomes by designing funding criteria that prioritise projects with cross-departmental and student-staff collaboration components, thereby encouraging more holistic approaches to teaching and research.

This sentiment is perhaps best captured by Participant 2, who notes:

> Internal funding is very important indeed. It allows projects to take place, encourages engagement with colleagues and other partners, and facilitates collaboration with students and others. It is also a learning environment for those who might then go on to seek external funding, whether or not this is associated with the same project. Without internal funding opportunities, we would risk research becoming a preserve of those who already have the skills, connections and confidence to see external funding.

However, the study also highlights several challenges, particularly regarding the administrative processes associated with managing internally funded projects. It is recommended that in order to address these, universities streamline any admission processes and provide clearer guidelines and support for financial and administrative management, so that educators can focus more on their pedagogical goals rather than procedural compliance.

The integration of students as partners in funded projects stands out as a particularly progressive practice, aligning with contemporary educational theories that advocate for more inclusive and participatory learning environments. Universities should therefore consider policies and training programmes that facilitate and enhance the role of students in research and teaching projects, so that they are not just seen as participants, but co-creators of knowledge.

While this study provides insightful findings, it is important to note its reliance on self-reported data, which may introduce biases or an overemphasis on positive impacts. Future research could mitigate this

by incorporating longitudinal data collection and a mixed-methods approach, which would triangulate self-reported outcomes with objective metrics of academic performance and project success.

Furthermore, while the findings are indicative of the positive roles of internal funding, they are derived from a single institution, which may limit the generalisability of the conclusions. Institutions with different cultural, structural, and strategic backgrounds may experience different outcomes from similar internal funding initiatives. However, these insights offer a strong foundation for future exploration across diverse institutions, potentially leading to more nuanced strategies that could further enhance the effectiveness of internal funding in various educational contexts.

Conclusion

This study sought to answer the research question: how does internal funding help develop scholarship in learning and teaching across an institution? The findings indicate that internal funding contributes to the development of pedagogical skills, facilitates collaboration between departments, and supports the integration of students as active partners in projects. While there are some challenges, such as administrative burdens, the benefits of internal funding are clear.

To enhance the impact of internal funding, institutions could consider refining their funding strategies to prioritise projects that encourage cross-departmental collaboration and student involvement. These recommendations can be applied to higher education institutions in various contexts, both in the UK and internationally, to strengthen the role of internal funding in supporting pedagogical development and academic collaboration.

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Disclosure statement

Notes on contributor

Sam Illingworth is a Professor in the Department of Learning and Teaching Enhancement at Edinburgh Napier University, where his research interests involve using creative pedagogies to address staff and student belonging in higher education. You can find out more about his work via his website www.samillingworth.com.

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