



Future STEAM Cities

Investment Plan for Kolding

URBACT



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Interreg

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SECTION 1: The policy context

1.1 Needs analysis in the territorial context

Kolding hosts four higher education institutions with around 5,000 students, mainly within humanities, liberal arts, and design. While this creates a vibrant academic environment, the city experiences a challenge in retaining graduates—many Master's students commute from other parts of Denmark, including Copenhagen, which reduces their connection to local opportunities. At the same time, several Kolding-based companies would like better access to technically skilled employees.

To strengthen the local talent pipeline, a number of initiatives are already in place. These include biannual job fairs connecting students and companies, participation in job fairs in other cities with more technical programmes, and the Hard Skills Station, which offers students hands-on, tech-focused learning in collaboration with local firms.

Although companies still report some difficulty attracting local technical talent, the overall direction is positive. Encouraging more technical interest among young people—starting as early as elementary school—combined with continued collaboration between education institutions and businesses, is seen as a promising long-term approach. In this regard, the experiences from Aveiro provide useful inspiration for Kolding's next steps. Talent development and retention are therefore the core focus of our investment plan.

1.2 The policy response

Kolding's Business and Growth Policy identifies "Access to labour and future skills" as a strategic priority, recognising that the city's long-term competitiveness depends on its ability to attract, develop, and retain talent. (https://www.kolding.dk/p/Politik/Politikker%20og%20strategier/E/Erhvervspolitik2024_web.pdf)

Despite hosting some of Denmark's largest IT employers and strong educational institutions, Kolding faces a persistent challenge: many graduates leave the city after completing their studies, while local companies must recruit skilled workers from elsewhere.

To address this challenge, the policy promotes stronger alignment between education and labour market needs through technical learning pathways, micro-credentials, and closer collaboration between educational institutions and businesses. The objective is to create clearer connections between learning and career opportunities in Kolding, helping more students see a future for themselves in the local labour market.

Within the Future STEAM Cities project, several testing activities have explored a more structured STEAM pathway spanning primary school and higher education. The purpose is not only to inspire interest in STEAM from an early age, but also to strengthen the local talent pipeline and support the long-term retention of skilled young people in Kolding.

The policy also highlights the importance of innovation and design thinking. As a UNESCO Design City with strong design and creative institutions, Kolding is uniquely positioned to use the "A" in STEAM to make technical and digital careers more accessible, relevant, and attractive to a broader range of young people.

This ambition is reflected in the Hard Skills Station initiative. Hard Skills Station serves as an upskilling hub where students can build technical and digital competencies, collaborate with local businesses, and engage in cross-disciplinary learning. By strengthening links between students, educational institutions, and employers, the initiative contributes directly to Kolding's goal of retaining talent and ensuring that more graduates choose to build their careers in the city.

SECTION 2: The investment proposal

2.1 Background to the proposal

Kolding is participating to adapt elements of the Aveiro STEAM City model to address local challenges related to talent retention, skills mismatches and stronger links between education and the labour market.

Kolding focuses on adapting selected modules that strengthen practical skills development, business–education collaboration and inclusive access to STEAM pathways.

The strategic rationale for transfer lies in using STEAM as a connector between schools, higher education, businesses and creative sectors, ensuring that young people develop both technical and transversal skills that match labour market needs and support Kolding’s ambition to position itself as a STEAM Tech city.

Summary description of the Urban Innovative Practice

Innovative dimension of the practice

The Aveiro STEAM City practice is innovative in its integrated, city-wide approach to STEAM, combining education, workforce training, technology infrastructure and creativity within a single urban strategy. Rather than treating STEAM as an isolated educational activity, the model embeds it into economic development, business innovation and civic engagement.

For Kolding, the most relevant innovative dimension is the strong alignment between education and business needs, supported by hands-on learning environments, challenges defined by companies, and modular actions that can be adapted without requiring large-scale technological infrastructure.

Achievements and results

The Aveiro STEAM City model has demonstrated clear results in improving STEAM and digital skills, strengthening employability and fostering innovation. Key achievements include large-scale implementation of Tech Labs in schools, successful business-driven bootcamps with high job placement rates, and sustained public–private collaboration through formal governance agreements.

These results show that the practice can effectively bridge the gap between education and the labour market—an outcome that is directly relevant to Kolding’s priorities of retaining graduates, supporting local businesses and building a resilient, future-oriented skills ecosystem.

2.2 Our starting point

Kolding faces challenges in retaining STEAM and digital talent and aligning education outcomes with labour market needs. Although the city hosts major IT and technology employers, many graduates leave for larger cities, while local companies look for talent in IT, digital and technical roles. This skills mismatch affects Kolding's competitiveness and limits the development of a sustainable local talent pipeline.

Previous relevant activity

Kolding has already taken steps to address these challenges through initiatives such as Campus Kolding partnerships, Coding Pirates, NextTech Lab (3D printing), and pilot actions like the Hard Skills Station. While these initiatives show strong local engagement, some have been pilot-based or dependent on short-term funding, limiting long-term impact.

Reasons for transferring the innovative practice

Kolding joined the Future STEAM Cities network to adapt the Aveiro STEAM City model as a structured, integrated approach to connecting education, businesses and skills development. The model offers practical, modular solutions that fit Kolding's ambition to become a STEAM Tech city and to strengthen local career pathways aligned with business needs.

Assets

- Strong IT and business ecosystem
- Active education and business partnerships
- Existing innovation and learning facilities
- Political support for skills and digitalisation

Barriers

- Graduate outmigration
- Weak coordination between education and business
- Reliance on short-term or volunteer-driven initiatives
- Low visibility and inclusion in STEAM pathways

2.3 The adapted version of the innovative practice

Building on Aveiro's Entrepreneurship Contests and Urban Challenges, Kolding is developing challenge-based learning activities where local companies and public organisations present real business and societal challenges to students. The concept has been adapted to reflect Kolding's strong tradition of collaboration

between educational institutions and businesses through initiatives such as Campus Kolding. The Kolding adaptation emphasises solving real workforce and innovation challenges identified by local employers, helping students develop relevant skills while increasing their awareness of career opportunities within the city.

Company-defined challenges and project-based learning

Businesses introduce real challenges from their daily operations into classrooms and learning environments. This allows students to work on real problems, develop relevant skills, and gain insight into professional working contexts, while companies benefit from fresh perspectives and early access to emerging talent.

Business Open Days and workplace-based learning

Structured visits, workshops and mentoring activities enable students to experience real work environments, understand career pathways and build direct relationships with local employers, strengthening education–employment transitions.

Hands-on STEAM learning linked to labour market needs

Practical STEAM activities are designed in collaboration with companies to reflect current and future skills demands, ensuring learning outcomes remain relevant and applied.

These priorities were selected because they directly address Kolding's skills mismatch and talent retention challenges, while leveraging the city's strong business ecosystem to create meaningful, real-world learning experiences for students.

2.4 The integrated approach and the participative process

Integrated approach

Kolding's development of the adapted STEAM practice is guided by an integrated approach that connects education, business development, skills policy and innovation. Kolding aims to bring schools, higher education institutions, businesses together to jointly shape learning activities linked to labour market needs.

Multi-stakeholder participation

The multi-stakeholder participation is embedded through the Kolding URBACT Local Group (ULG), which brings together representatives from education, business and higher education. The ULG acts as a co-creation platform, where stakeholders jointly define priorities, test initiatives and reflect on outcomes.

Businesses in industry and technical fields are actively involved in Open Days bringing real-world challenges into learning environments and engaging directly with students. Educational actors shape how these challenges are translated into meaningful learning activities.

SECTION 3: The adapted innovation project

3.1 The Value Proposition

The adapted STEAM activities in Kolding will create an integrated talent development pathway that connects education, business, and future employment opportunities. By combining company-defined challenges, hackathons, Business Open Days, and hands-on STEAM learning, the project addresses one of Kolding's key challenges: retaining more young talent and ensuring that local businesses have access to the skills they need in the future.

Rather than delivering isolated activities, the four actions form a coherent programme. Students first develop technical, digital, and creative competencies through hands-on STEAM learning activities. They then apply these skills to real-world challenges defined by local businesses and public organisations, gaining practical experience in problem-solving, teamwork, and innovation. Through hackathons and challenge-based events, students work directly with employers and gain insight into how their skills can be used in professional contexts. Finally, Business Open Days and workplace-based learning activities provide direct exposure to local companies, career pathways, and employment opportunities in Kolding.

Together, these actions offer a journey from inspiration and skills development to employer engagement and career awareness. The programme strengthens the relevance of education, helps students build professional networks, and increases the likelihood that graduates will choose to study, work, and build their careers in Kolding.

In the short term, the project will increase student engagement in STEAM subjects, strengthen awareness of local career opportunities, and deepen collaboration between educational institutions and businesses. In the medium term, it will reduce skills mismatches by aligning learning experiences more closely with labour market needs and creating stronger education-to-employment pathways. In the long term, it will contribute to Kolding's ambition of becoming a Tech City by building a stronger local talent pipeline, supporting business competitiveness, and reducing graduate outmigration.

The STEAM activities will address Kolding's talent retention and skills mismatch challenges through a coordinated work programme consisting of four interconnected pillars:

- Business Challenges
- Hackathons
- Business Open Days

- Hands-on STEAM Learning

3.2 The workplan

Challenges

Business Challenges connect students directly with local companies through challenge-based learning. Companies introduce real-world business or societal challenges from their daily operations into educational settings, allowing students to work on authentic problems while developing technical, creative, and collaborative skills.

The activity builds on Kolding's strong business network and adapts Aveiro's Entrepreneurship Contest concepts to focus specifically on workforce development and local talent retention.

The relevant baseline, output and result indicators

The baseline is currently low, with only a limited number of structured collaborations between companies and students. A pilot activity has been completed between local companies and SONIC College.

The ambition is to establish at least one annual Business Challenge involving local companies and educational institutions. In the longer term, challenge-based learning should become an integrated component of selected university and higher education courses.

Expected results include:

- Increased collaboration between businesses and educational institutions.
- More students working on real-world business cases.
- Greater awareness of local career opportunities.
- Stronger links between graduates and local employers.

Risk Analysis

Key risks include:

- Limited student participation due to competing academic priorities.
- Insufficient commitment from participating companies.
- Challenges in identifying suitable business cases and mentors.

Timeframe and Phasing

- 2026: Pilot challenge involving 20–30 students.

- 2027 onwards: Expansion to additional educational institutions and a larger number of participating students and companies.

Hackathon

Hackathons provide intensive innovation events where students work with large datasets and real-world challenges provided by companies, public organisations, or the municipality.

As data increasingly becomes a critical resource for both businesses and cities, hackathons offer organisations fresh perspectives on how to analyse and create value from complex datasets. At the same time, students gain practical experience working with real data, strengthening both technical competencies and employability.

The Kolding model expands the traditional data hackathon format by integrating the "A" in STEAM, for example through collaboration with design and communication students who can help visualise and communicate data insights.

The relevant baseline, output and result indicators

Hackathons are currently rare in Kolding. A pilot hackathon with SDU Data Science students is planned for May 2026.

The ambition is to establish an annual hackathon involving students, businesses, and public organisations, with integration into selected study programmes.

Expected results include:

- Increased student-business collaboration.
- New insights generated from business and municipal datasets.
- Stronger engagement of international students in local business networks.
- Enhanced interdisciplinary collaboration between technical and creative disciplines.

Risk Analysis

Key risks include:

- Limited student participation.
- Insufficient company engagement.
- Difficulty securing datasets and challenge owners.

Timeframe and Phasing

- May 2026: Pilot hackathon.
- 2027 onwards: Annual hackathon subject to funding and partner commitment.

Business Open Days and workplace-based learning

Business Open Days provide structured opportunities for students to engage directly with local employers through company visits, workplace experiences, presentations, and mentoring activities.

The objective is to strengthen awareness of career opportunities in Kolding, particularly within technical, industrial, and digital sectors that may be less visible to students.

The relevant baseline, output and result indicators

Kolding currently hosts occasional company-student engagement events, but these activities are not coordinated through a common framework and only reach selected groups of students.

Several pilot activities have already been conducted with positive feedback from both elementary and university students.

The ambition is to establish recurring formats that can be scaled across multiple educational institutions.

Expected results include:

- Increased student awareness of local employers.
- More direct interaction between students and businesses.
- Stronger education-to-employment pathways.
- Improved attractiveness of Kolding as a place to study and work.

Risk analysis

Key risks include:

- Difficulty attracting sufficient student participation outside mandatory activities.
- Limited availability of company representatives.
- Funding requirements for transportation and event logistics.

Timeframe and Phasing

- 2026: Consolidate pilot formats.
- 2027 onwards: Deliver four annual Business Open Day activities (two per semester).

Hands-on STEAM learning linked to labour market needs

Hands-on STEAM Learning focuses on practical skills development through the Hard Skills Station initiative and other business-connected learning activities.

Building on Aveiro's Tech Labs model, Kolding is adapting the concept to create shared learning environments where students, educational institutions, and businesses collaborate around technical and digital competencies linked to current and future labour market needs.

Activities may include short courses, workshops, micro-credentials, and practical learning modules delivered jointly by educational institutions and industry professionals.

The relevant baseline, output and result indicators

The Hard Skills Station initiative has already demonstrated strong potential but has experienced periods of low activity due to organisational changes.

The ambition is to establish a stable platform for business-connected skills development and expand the number of practical learning opportunities available to students across educational institutions.

Expected results include:

- Increased participation in extracurricular skills development.
- Stronger technical and digital competencies among students.
- Improved alignment between educational provision and labour market demand.
- Greater student engagement with local businesses.

Risk analysis

Key risks include:

- Lack of sustainable funding.
- Limited student participation.
- Difficulty designing courses that are sufficiently attractive and recognised by students and employers.

Time frames and phasing

- 2026: Strengthen governance and operating model for Hard Skills Station.
- 2027 onwards: Secure funding and expand course offerings linked to the Business Challenges, Hackathons, and Business Open Days programme.

3.3 Governance and delivery model

The project will be delivered through a collaborative governance model that builds on existing partnerships between Business Kolding, the City of Kolding, educational institutions, and local businesses. The model is designed to ensure strategic alignment with local skills and business development priorities while providing clear operational responsibility for each workstream.

Lead Partner and Project Coordination

Business Kolding will act as the overall project lead and coordinating organisation. Business Kolding will be responsible for project management, stakeholder engagement, fundraising, monitoring and evaluation, communication activities, and coordination across all project partners. Business Kolding will also act as the primary interface with local businesses and ensure that labour market needs are reflected in project activities.

Strategic Partners and Roles

The City of Kolding

Provides strategic oversight and alignment with relevant municipal initiatives and provides access to schools, departments, and local networks.
Participates in steering and decision-making processes.

Pædagogisk Center (Kolding STEAM Centre)

Leads engagement with primary and lower secondary schools.
Supports the pedagogical development of STEAM activities.
Contributes expertise in teacher engagement and educational methodologies.

Campus Kolding

Functions as a coordinating platform between educational institutions and businesses.
Supports Business Open Days and cross-campus activities.
Facilitates communication and collaboration across the educational ecosystem.

University of Southern Denmark (SDU)

Involved in the Business Challenges and Hackathons involving university students. Provides academic expertise, access to students, and integration of selected activities into relevant study programmes.

Kolding School of Design

Strengthens the integration of design thinking, creativity, and user-centred innovation within STEAM activities. Supports interdisciplinary collaboration between technical and creative disciplines. Contributes to hackathons and challenge-based learning activities.

UC Syd

Supports educational innovation and skills development activities.
Facilitates participation from relevant student groups.

IBA – International Business Academy

Supports student participation in business challenges and workplace-based learning. Contributes entrepreneurship and innovation expertise.
Facilitates engagement with local SMEs and business networks.

Local Businesses

Act as challenge owners, mentors, hosts, prize-sponsors and collaborators across all four programme pillars. Provide real-world cases, datasets, workplace visits, guest lectures, and mentoring. Contribute practical insights into current and future workforce needs. Decision-Making and Governance Structure

The project will be governed through a two-level structure:

Steering Group

The Steering Group will provide strategic oversight and approve annual work plans, budgets, and major project decisions. It will consist of representatives from Business Kolding, the City of Kolding, and selected educational institutions and business representatives.

Operational Working Group

An Operational Working Group led by Business Kolding will coordinate the day-to-day implementation of activities. Representatives from participating educational institutions and businesses will be involved regularly to plan, deliver, and monitor activities across the four programme pillars.

3.4 Overall project schedule

This section should include an overview of the project phasing and timescales.

	Q1	Q2	Q3	Q4
Challenges			X	
Open Days - Elementary	X		X	
Open Days - University		X		X
Hackathon			X	
Hands-on / Hard Skills	X	X	X	X

SECTION 4: Budget

4.1 Project costs

The proposed investment will support the delivery of four interconnected programme pillars designed to strengthen talent retention, skills development, and business-education collaboration in Kolding. The figures below represent current planning estimates and will be refined as implementation partnerships and funding arrangements are confirmed.

Business Challenges

A curriculum-integrated challenge format where companies provide real-world cases for students to solve as part of their studies.

Cost Category	Estimated Cost (DKK)
Planning and coordination	15,000
Company engagement (kick-off, mentoring and final presentations)	7,500
Facilitation and administration	10,000
Student recognition and awards	5,000
Total annual cost	37,500

Business Open Days

Four annual visits connecting students with local employers through workplace visits, presentations, and mentoring activities.

Cost Category	Estimated Cost (DKK)
Transport	8,000
Food and refreshments	2,500
Planning and coordination	8,000
Total annual cost	18,500

Hackathon

An annual two-day innovation event where students work with companies and public organisations on real-world datasets and challenges.

Cost Category	Estimated Cost (DKK)
Food and refreshments	57,500

Project management and staffing	50,000
Company engagement and mentoring support	15,000
Venue and logistics	10,000
Awards and prizes	17,500
Communication and promotion	15,000
Contingency	7,500
Gross cost	172,500
Expected company contributions	-20,000
Net annual cost	152,500

Hands-on STEAM Learning (Hard Skills Station)

A programme of practical courses, workshops, and business-connected learning activities delivered through Hard Skills Station.

Cost Category	Estimated Cost (DKK)
Course development and coordination	20,000
External lecturers and facilitators	55,000
Learning materials and equipment	20,000
Communication and recruitment	10,000
Administration and evaluation	15,000
Total annual cost	120,000

Annual Programme Budget

Activity	Annual Cost (DKK)
Business Challenges	37,500
Business Open Days	18,500
Hackathon	152,500

Hands-on STEAM Learning	120,000
Total Annual Programme Cost	328,500

This represents a coordinated investment in a talent development pathway that combines skills development, business engagement, practical learning, and career awareness activities. The programme is designed to leverage in-kind contributions from educational institutions and participating businesses, increasing the overall value generated by the investment.

4.2 Investment sources

The estimated annual programme cost is approximately **330,000 DKK**. The funding strategy is based on a combination of municipal support, external grants, private sponsorships, company contributions, and in-kind resources from educational partners.

Business Kolding will lead all funding and resource mobilisation activities. As project lead, Business Kolding will be responsible for identifying funding opportunities with support from the city of Kolding, coordinating funding applications, developing sponsorship agreements, and securing contributions from project partners.

Funding Source	Potential Contribution	Activities Funded
EU Programmes (e.g. Erasmus+, Interreg, ESF+)	200,000 - 450,000 DKK annually	Hackathons, international challenge activities, student exchanges, innovation projects and transnational collaboration
Private Foundations and Corporate Funds	50,000 - 100,000 DKK annually	Business Challenges, awards, student engagement activities, inclusion and diversity initiatives
Company Sponsorships and Participation Fees	20,000 - 50,000 DKK annually	Hackathons, Business Open Days, mentoring activities and challenge-based learning
In-kind Contributions from Educational Institutions	Estimated value 50,000+ DKK annually	Facilities, teaching time, supervision, communication and student recruitment

Funding Strategy

Business Kolding will pursue a phased funding strategy to ensure both implementation and long-term sustainability.

In the short term (2026–2027), the focus will be on securing municipal support from the City of Kolding, company sponsorships, and foundation funding to launch and scale the four activities. Existing relationships with local businesses and business networks will be leveraged to sponsorship contributions, mentoring resources, challenge cases, and other in-kind support.

In parallel, Business Kolding will work with educational partners to identify and apply for relevant national and European funding programmes. Particular attention will be given to programmes supporting skills development, entrepreneurship, talent attraction, digitalisation, and business-education collaboration.

In the medium term (2027–2029), the objective is to establish a more diversified funding portfolio that combines public funding, private sponsorship, and project-based external grants. This will reduce dependency on any single funding source and create a more resilient financial model.

Funding Gaps

Current discussions indicate that company contributions, and partner in-kind resources could cover approximately 70,000–100,000 DKK annually. This leaves an estimated annual funding gap of 170,000 - 260,000 DKK that will need to be secured through foundations, sponsorships, and national or European funding programmes.

The long-term ambition is to embed key elements of the programme within existing educational and business support structures, while maintaining external funding streams for innovation activities such as Hackathons and Business Challenges. This will ensure that the programme remains sustainable beyond individual funding periods and continues to contribute to Kolding's talent retention and workforce development objectives.

SECTION 5: Monitoring and Evaluation

5.1 The Monitoring and evaluation approach

This section should include:

- Details of the progress monitoring approach throughout the project lifespan
- Explanation of whether the monitoring and evaluation approach will be cumulative or summative
- Confirmation as to whether an external evaluator will be appointed or not

The monitoring and evaluation (M&E) approach for the Kolding Future STEAM Cities investment plan is designed to ensure that project activities are implemented effectively, progress is continuously assessed, and lessons learned are integrated into future development. The approach supports both operational project management and longer-term strategic learning related to talent retention, STEAM engagement and stronger collaboration between education and business ecosystems.

Monitoring will take place throughout the full project lifespan and will be coordinated by Business Kolding in collaboration with project partners, including educational institutions, municipal actors and participating businesses. Progress monitoring will focus on both implementation indicators (outputs) and broader development effects (results and outcomes). This includes tracking participation levels, business engagement, student experiences, collaboration activities and the development of new STEAM-related learning formats.

The monitoring process will combine quantitative and qualitative methods. Quantitative monitoring will include participation statistics, number of events and activities delivered, institutional involvement and business participation. Qualitative monitoring will include participant feedback, stakeholder interviews and reflection sessions used to evaluate pilot actions and identify opportunities for improvement. This combined approach ensures that both measurable outputs and broader social and economic effects in the local environment can be captured.

Continuous monitoring and regular stakeholder reflection will allow project partners to adapt activities, improve formats and respond to emerging needs throughout the project lifecycle. This is particularly important given the experimental and partnership-based nature of the adapted STEAM activities, where iterative learning and adjustment are central to achieving long-term impact.

At key milestones, summative evaluation elements will also be included to assess the overall effectiveness of the investment plan and its contribution to Kolding's strategic ambitions as a future STEAM Tech city. These evaluations will assess the extent to which the project has strengthened education–business collaboration, improved awareness of local career opportunities and contributed to stronger local STEAM pathways.

At this stage, the project does not foresee the formal appointment of an external evaluator during the initial pilot and implementation phase. Evaluation activities are expected to be carried out internally by project partners through coordinated monitoring processes and stakeholder-based assessment. However, depending on future funding opportunities and project scaling, the possibility of involving an external evaluator for larger-scale impact assessment may be considered in later phases.

5.2 The monitoring and evaluation framework

This section should include:

- The output indicators for the project, including baseline and target values linked to the schedule
- The result indicators for the project, including baseline and target values linked to the schedule

The monitoring and evaluation framework combines continuous activity monitoring with broader assessment of outcomes related to skills development, education–business collaboration, innovation capacity and talent retention. Monitoring activities will be coordinated by Business Kolding in collaboration with project partners and stakeholders participating in the URBACT Local Group (ULG). As the proposed activities are currently limited, pilot-based or not systematically established, baseline values are considered to be low or zero prior to implementation.

Table 1 presents the overall monitoring framework, including the proposed actions, output indicators, result indicators and their expected long-term contributions. The framework combines measurable activity delivery with broader qualitative and strategic outcomes linked to Kolding's ambitions as a future STEAM Tech city.

Action	Output Indicators	Result Indicators	Long-term Contribution
Hackathon		50% of participating students report	Stronger innovation and

	1 annual hackathon organised with 70 participating students annually	increased interest in deeper technical learning	STEAM culture in Kolding
		70% of participants report improved confidence in technical and problem-solving skills	Stronger collaboration between students and local businesses
		25% of participants report increased interest in entrepreneurship or innovation activities	Contribution to entrepreneurial and innovation-oriented competencies and interests among students
		20% of participating students report increased interest in remaining in Kolding after graduation	Contribution to long-term talent retention through attachment of students and local businesses
Business Open Days and workplace-based learning	2 annual events for primary school students with 80 participating primary school children annually	65% of participating children report increased interest in STEAM-related education pathways	Increased awareness of local educational and career opportunities
		70% of participating students report improved understanding of practical applications of STEAM skills	Stronger connection between education and local business environment
	2 annual events for higher education	55% of participating higher education students report increased	Increased local talent attraction and retention

	students with 50 participating higher education students annually	awareness of career opportunities in Kolding	
Hands-on STEAM learning linked to labour market needs	2 company-defined challenges delivered annually	70% of participating students report improved understanding of real-world business challenges	Increased labour market relevance of STEAM learning
	Minimum 8 participating students annually	65% of participating students report increased confidence in practical and technical competencies	Stronger education-business collaboration
	Minimum 2 participating companies annually	60% of students report increased interest in innovation and interdisciplinary collaboration	Contribution to entrepreneurial and innovation-oriented competencies
		66% of participating businesses report positive value from collaboration activities	Contribution to problem solving in local businesses

Table 1: Monitoring and evaluation framework.

The monitoring framework combines quantitative monitoring of participation and activity delivery with qualitative assessment of student experiences, business value and broader innovation-related outcomes. Data collection methods are designed to remain practical and manageable while still providing meaningful insight into the effectiveness and long-term contribution of the activities.

Table 2 outlines the proposed monitoring methods, data collection approaches, monitoring frequency and responsible actors connected to the indicators presented in Table 1.

Monitoring Area	Data Collection Method	Frequency	Responsible Actors
Participation and activity delivery	Registration lists, participation statistics and event records	After each activity	Business Kolding and activity partners
Student technical learning and confidence	Pre/post activity surveys, participant feedback forms and interviews	After activities and annually	Educational institutions and Business Kolding
Student awareness of local career and education opportunities	Surveys and reflection questionnaires	After activities and annually	Educational institutions and Business Kolding
Entrepreneurship, innovation and interdisciplinary collaboration outcomes	Student surveys and qualitative feedback related to innovation, entrepreneurship and collaboration experiences	After activities and annually	Educational institutions and Business Kolding
Student attachment to Kolding and local career opportunities	Surveys and qualitative interviews with participating students	Annually	Business Kolding and educational institutions
Business engagement and value from collaboration activities	Interviews, feedback meetings and stakeholder reflection sessions with participating businesses	Annually	Business Kolding and participating businesses

Table 2: Monitoring methods and data sources

The evaluation approach is primarily designed to support continuous learning and improvement throughout the implementation process. As several of the

proposed activities build on pilot actions and new collaboration formats, the evaluation framework emphasises cumulative learning, stakeholder reflection and adaptive implementation alongside summative assessment at key milestones.

Table 3 summarises the overall evaluation approach, including monitoring methodology, baseline assumptions, coordination responsibilities and the intended use of evaluation findings throughout the project lifecycle.

Evaluation Element	Approach
Monitoring approach	Continuous and cumulative monitoring throughout the project lifecycle
Evaluation type	Primarily formative evaluation combined with summative evaluation at key milestones
Evaluation focus	Delivery of activities, participant outcomes, business collaboration and contribution to long-term strategic ambitions
Baseline	Baseline values for the proposed activities are considered to be zero or limited prior to implementation, as activities are currently pilot-based, sporadic or not yet systematically established
Data approach	Combination of quantitative participation data and qualitative stakeholder feedback
External evaluator	No formal external evaluator foreseen during the pilot phase; possibility may be explored in future scaling phases
Responsible coordination	Business Kolding in collaboration with project partners and participating educational institutions
Use of evaluation findings	Continuous improvement of activities, collaboration formats and future STEAM-related initiatives

Table 3: Evaluation approach.