

► Industry Advisory Board establishment in Indonesian polytechnics

► Report and guidance following pilots conducted under the Skills for Prosperity programme

Key points

- Industry Advisory Boards (IABs) pilots carried out in four polytechnics suggest that this can be an effective working model for systematic sectoral industry engagement in TVET institutions
- Each IAB can generate unique skill system solutions in response to the skills demand challenges experienced.
- Although each IAB has its own characteristics, lessons learnt show that common principles can be used to establish boards in different sectors and provinces.

Introduction and background

The skills system in Indonesia is undergoing a revitalization to improve the relevance of education and training. Three million young people enter the labour force every year, and as the economy seeks to keep pace with the development of technological advancement, decarbonization and deeper globalization, the need for workers with the skills required by industry becomes ever more important.

Presidential Decree 68/2022 on the *Revitalisation of TVET* addresses this challenge by improving ministerial coordination across the design, planning and delivery of TVET; and inviting a greater involvement of industry in the national skills system infrastructure.

The Ministry of Education Culture Research and Technology (MoECRT) has promoted the 'Link and Match'¹ between vocational institutions and individual industries, which encourages TVET institutions to establish links with multiple relevant industries. The activities encouraged under the Link and Match policy are broad and include inputs into curriculum design, student and teacher internships, loans or donations of equipment for training purposes, and research collaborations. Agreements are usually made under

a Memorandum of Understanding (MOU) between the vocational institution and the individual firm.

Based on the Link and Match objectives, and incorporating existing international models of good practice, the ILO Skills for Prosperity Programme (SfP)², funded by UK government, facilitated the pilot implementation of Industry Advisory Boards, across four MoECRT polytechnic programme partners. The partners are Batam State Polytechnic (Polibatam) in Riau Islands, State Maritime Polytechnic Indonesia (Polimarin) in Central Java, Surabaya State Shipbuilding Polytechnic (PPNS) in East Java and Manado State Polytechnic (Polimano) in North Sulawesi; and the pilot activities were carried out between 2020 and 2023.

The Industry Advisory Board pilots are intended to explore the institutionalization of Link and Match objectives, supporting systematic engagement with priority industry sectors as an over-arching forum for individual agreements.

This report will set out the principles and development methods applied, reviewing differences in implementation, membership and activities across the partners. Based on the observations and lessons learnt from these pilot activities, the report will then go

1 MoECRT, 2020. *Kemitraan Pendidikan tinggi Vokasi dengan industry, dunia usaha, dan dunia kerja*. Available: <https://assets.mitrastudi.id/program/25/1596195426.pdf>

2 The ILO Skills for Prosperity Programme, funded by UK government aims to improve skills development policies and systems to respond effectively to maritime skills demands and job opportunities. The programme takes targeted action to promote skills for employment and decent jobs for young women and men, including disadvantaged groups. Further information available: https://www.ilo.org/jakarta/whatwedo/projects/WCMS_761369/lang--en/index.htm#:~:text=The%20SfP%2DIndonesia%20programme%20aims,careers%20in%20the%20maritime%20industry.

on to make recommendations and provide guidance that may be considered for wider implementation in the Indonesian vocational system.

Introducing Industry Advisory Boards (IABs)

Industry Advisory Boards (IABs), also known as Employer Advisory Boards or Forums, are groups of industry representatives, usually from a single sector in a geographic region, convened by a representative of a vocational or academic institution, to advise on and develop collaborative, evidence-based responses and solutions to local skills needs.

The sectoral approach is important as this considers skills needs from the perspective of the sector, rather than taking a generic approach to skills development. Establishing sector-level dialogues between industry and vocational institutions brings together industry professionals and teaching teams who can discuss curriculum and skills in technical detail, with a clear focus on providing graduates with the skills sets required to find productive employment.

IABs have been utilized by the higher education community for many years, often found in engineering and technology subject areas where there is a need for the curriculum to reflect the latest technology advances, and where industry perceives a benefit in sharing knowledge with an academic partner in order to undertake research and/or developing a pipeline of graduate talent with specific cutting-edge knowledge and skills.

In recent years, IABs are being increasingly established by vocational institutions. These are sometimes responses to specific priority sectors requiring graduates with skills in key technologies and/or soft skills in relation to industry clusters³; and sometimes more general as part of a systematic method of ensuring that local provision is demand-driven⁴.

There is little literature on the concept of IABs centered around individual TVET institutions, partly because this is a relatively new concept, and partly due to the informal and sometimes transient nature of these forums. However, the Skills for Prosperity was guided by concepts of the ILO on Sectoral Skills Councils⁵; the Independent Commission of the College of the Future,

whose publications describe TVET institutions as 'Anchor Institutions', acting as sector or skills focused hubs for employers⁶; as well as the Link and Match principles promoted by MoECRT.

Developing Industry Advisory Boards in four Indonesian polytechnics

The development of Industry Advisory Boards within the four polytechnic partners began with a series of consultations with the four polytechnic Directors and their Skills for Prosperity project implementation teams. PPNS had previously established such a board, based in part on their strong institutional history with PT Pal.

Formal capacity building was delivered through the ILO ITC Turin, the International Training Centre of the ILO. In each of the four polytechnics, the Director and person responsible were enrolled on the six-week e-learning programme entitled, "Sectoral Approaches to Skills Development"⁷. This course helped to set out the concept and purpose of sectoral approaches such as IABs, and allowed the reviewing and learning of implementation lessons through a range of global examples.

In the case of the Skills for Prosperity programme, the scope was that the pilot IABs would be implemented at the institutional level as a mechanism for collating and verifying technical and soft skills input into the four D4 Study Programmes being developed in each of the four partner institutions. The Study Programmes in development were **Logistics and International Trade** in Polibatam, **Seafaring Engineering** in Polimarin, **Global Tourism Management** in Polimando, and **Shipbuilding Engineering** in PPNS.

These institutions were also supported in the curriculum development process by international academic cooperations, which were established to build institutional capacity and support alignment to global as well as local industry skills demands.

3 Cluster" defined as a group of firms, related economic actors and institutions located near one another that have reached a sufficient scale to develop specialized expertise (Cedefop TVET Glossary 2011).

4 "Demand-driven" means responsive to the workforce challenges and needs defined by employers (UNEVOC-UNESCO TVETipedia Glossary).

5 ILO, 2021. Resource Guide on Sector Skills Bodies. Available: https://www.ilo.org/skills/areas/skills-policies-and-systems/WCMS_818528/lang-en/index.htm

6 Independent Commission of the College of the Future, 2020. UK-wide final report available: <https://static1.squarespace.com/static/5c8847f58dfc8c45fa705366/t/5fa281933c71c92e01556060/1604485524723/CoFT+October+report+-+English.pdf>

7 ITC Turin, Sectoral Approaches to Skills Development E-learning Course. Available: <https://www.itcilo.org/courses/sectoral-approaches-skills-development-1>



May 2023. Members of Polimarin Industrial Advisory Board join capacity building workshop on Sectoral Skills Committee development

Analysis

The following analysis provides key information about the Industry Advisory Boards piloted in the four institutions. Data is provided through a series of tables, each followed by a brief description.

Table 1: Scope of Industry Advisory Boards

	Polibatam	Polimarin	Polimanado	PPNS
D4 Study Programme developed through SfP	Logistics and International Trade	Seafaring Engineering	Global Tourism Management	Shipbuilding Engineering
Location	Batam, Riau Islands	Semarang, Central Java	Manado, North Sulawesi	Surabaya, East Java
International Academic/Vocational Partner	City of Glasgow College	Solent University	University of Gloucestershire	Strathclyde University
Industry Advisory Board Name	Logistics and International Trade (LIT) Advisory Board	Polimarin Industrial Advisory Board	Tourism Advisory Board	PPNS Industry Advisory Board
Industry Advisory Board Coverage within the Polytechnic	Logistics and International Trade Advisory Board is specific to the LIT Study Programme	Polimarin Industrial Advisory Board is specific to the Seafaring Engineering Study Programme.	The Tourism Advisory Board operates on behalf of the Tourism Department at Polimanado.	The PPNS Advisory Board operates on behalf of the whole of PPNS as an institution.
Date Established	September 2021	April 2021	March 2021	The IAB had been established initially in 1994. Was reactivated through SfP in August 2021.

Terms of Reference	Yes, with objectives aligned with Polibatam Industrial Engagement Strategy	Yes	Technical Guidance of Mitra DUDI used as reference ⁸	Yes
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Each polytechnic established or re-established their IABs through the Skills for Prosperity Programme during 2021.

Although the industry sector in focus is well defined in all cases, there is some natural variations in the scope of alignment from the polytechnic perspective. In Polibatam the IAB exists to support the development of a single D4 Study Programme meanwhile in Polimarin establish for seafaring (engineering and navigation); For Polimanado, the IAB aligns at the departmental or subject level; and the IAB in PPNS corresponds to the whole institution.

This seems an efficient approach on the part of the polytechnics, where in Polimanado employer inputs may be applied across the wider tourism department, and for PPNS, as a shipbuilding specialist polytechnic, one large shipbuilding advisory board can engage effectively at the institutional level.

IAB Terms of Reference were established in all cases. The standard template is included at the end of the document.



April 2023. PPNS Industry Advisory Board gains support from the shipbuilding industry to facilitate internships for students with disabilities.

Table 2: Membership and Structure

	Polibatam	Polimarin	Polimanado	PPNS
Who performs secretariat function?	Polibatam (External Relations Office)	Polimarin (International Relation Unit)	Polimanado (led by the person in charge (PIC) for Industry Linkage under the Skills for Prosperity Project)	PPNS with IAB members identify and select the secretariate body. This responsibility is assigned for a three year period by decree. PPNS International Relations Unit also supports.

How are members / participants selected	Initially developed through relevant industries who already had involvement with Polibatam. Consultations followed with a focus on industries with an international logistics function (important to note that these are not necessarily logistics businesses)	Membership is based on the existing partners of the polytechnic based on a one year term. A consultation then followed before their committed to membership. MoECRT is a member	Largely developed through personal relationships held by departmental staff. This includes alumni working locally. Membership is for a one-year term.	Based on consultation with IPERINDO and other stakeholders. An international steering board is being established with the support of University of Strathclyde
Are there key associations or Industries who have played a pivotal role in the IAB	Indonesian Logistics and Forwarders Association (ALFI), Indonesian Logistics Association (ALI), Customs Expert Associations (ATAK); Infineon	Consortium of Indonesian Manning Agency (CIMA)	No	IPERINDO and PT PAL, PT ADILUHUNG
Is there a core membership or steering board	No, Polibatam took the approach of leaving the membership flexible for the first two years.	Yes, A steering board membership is established with one year term.	No	A Steering Board membership is established with a three year term.
Is the membership personal or on behalf of the organization or industry?	For professional associations the membership is on behalf of the organization; for industry, most are personal.	On behalf of the organization	On behalf of the organization	Steering Committee members are named individuals, membership is based on organization representation
To what extent is the membership static (i.e. the same people at most meetings)	It varies depending on the topic of the meeting. Though there are individuals that have shown sustained support.	Very likely	Not static	The Steering Committee is fixed, and working groups are established to discuss the issues that are priorities important to them.

Who is the Chairperson?	Initially the Head of Study Program was appointed, with the intention that Industry partners increase their leadership responsibility	Chair: Bapak Gatot Cahyo Sudewo Deputy: Bapak Akhmad Subaidi	The ToR states that Politechnic Director would be the Chair, with two Vice Chairs from Industry. However in practice all meetings have been chaired by another member of polytechnic staff.	PPNS has facilitated, and selected resource persons have run individual agenda items. Based on IAB Annual Meeting 2022, they have selected the secretariat body from 2023 – 2026. Chair: Edi Widarto Deputy: Agus Mulyono
How is the agenda set?	The Chair sets the agenda, and participants are invited to propose points for discussion.	The secretariat sets the agenda in consultation with the Chair	The agenda was taken from the Skills for Prosperity workplan, no other agenda items were invited or included.	The secretariat body selects a number of issues to focus on each year.

The process of establishing IAB memberships has been approached in different ways by the four polytechnics, though all have leveraged their existing relationships, including their alumni network as the starting point. Two polytechnics, Polimarín and PPNS have used their International Relations Office to undertake the work of contacting and coordinating with industry, which suggests that such functions may be an appropriate place to house this work in other institutions.

In most cases, there has been visible leadership by the Polytechnic Director. The Director was designated to chair at least the initial meeting, although in practice this was delegated in Polimarín.

Strategic collaborations with at least one industry representative body were established in three of the four polytechnics: ALI, ALFI and ATAK at Polibatam; CIMA at Polimarín; and IPERINDO at PPNS. The involvement of these established representative bodies was helpful in developing a shared sense of ownership from industry, and providing access to a wider relevant membership network. Importantly, these employer bodies also brought a practical experience of running and managing an industry representative board in the relevant sector.

Two of the four polytechnics have a particularly strong relationship with a key large industry. For PPNS this is PT Pal, who has been a strategic partner to the polytechnic since the institution's foundation. For Polibatam, the

German semi-conductor firm Infineon has played an important role in supporting the development of the IAB.

All four polytechnics have a flexible membership at their meetings, reflecting that industry members cannot always be available, and that some discussion topics will be more relevant to some members than others. There is also a fluid distinction of those who are attending as individual members and/or organizational representatives. This fluid distinction between individuals and company representatives can be helpful in the formation stages of an IAB, when leveraging personal relationships is critical and discussions are often more general and thematic in nature. However, it may be important to clarify the distinction between personal opinion and the view of a large industry or industry representative where decisions or commitments are being made (e.g. commitment to target numbers of internships, or cost sharing agreements for equipment or training resource development)

The Steering Committee emerging in PPNS has formalized the roles, responsibilities and required commitments of strategic or core members. In this case, this has provided a structure for setting annual priorities for the IAB agenda, and for inviting a more international membership through the Skills for Prosperity academic partner Strathclyde University.

Table 3: Facilitating Meetings

	Polibatam	Polimarin	Polimanado	PPNS
What is the frequency and timing of meetings?	As needed, usually two to three meetings per year. Aiming to put in place an annual meeting.	Twice a year, or if there is an urgent matter to discuss. Dates and times set by Polimarin.	Two meetings have been held as required by the SfP workplan, but no further meetings scheduled at the time of this report (May 2023).	There is at least one annual meeting for all members, aside from that 'working groups' meet as needed.
Where and at what time do meetings take place?	At Polibatam, usually in the afternoon.	At Polimarin, usually in the afternoon.	The first meeting was a two day event at a local hotel, the second was a one day event at a local hotel	Usually a half day event at local hotel
Is the agenda shared in advance? And minutes or actions shared afterwards?	The agenda is shared with the invitation	Yes, both agenda and minutes are shared.	Agenda is shared.	Yes, both agenda and actions are shared.
Direct Expenses	Participant transportation	Participant transportation and resource person fees	Venue hire, participant transportation and meals	Venue hire, participant transportation and meals

All IABs report challenges in securing members' availability. Polibatam in particular, reported that senior industry representatives find it difficult to commit to meeting times that are suitable for all.

Two polytechnics facilitated the meetings on their campus, and two have held their meetings off-campus. The rationale on the one hand is that off-campus meetings can accommodate greater numbers. There are fewer distractions for polytechnic staff, and a hotel environment may be perceived as more appealing for participants. On the other hand, there is a case that inviting industry to the campus supports a deepening relationship and understanding of the polytechnic institution by industry board members. The regular presence of industry representatives on campus can provide a powerful message and normative influence for students and teachers. Regularly seeing industry representatives and alumni on campus, can often inspire students who may otherwise have limited exposure to professional from their field of study. Familiarity with campus facilities may also help industry

representatives to understand the 'gaps' encountered in graduates' workplace transitions, which can help focus potential solutions.

Timings of meetings have either been for a full day or have taken place in the afternoon, which perhaps indicates the suitability of these times for the respective industries.

Aside from Polimanado, all polytechnic IABs have held meetings beyond the minimum stipulated in the Skills for Prosperity workplans, and feedback indicates that these three IABs will continue to meet, demonstrating sustainably beyond the term of the Skills for Prosperity programme.

Table 4: Content and Output of Industry Advisory Boards

	Polibatam	Polimarin	Polimanager	PPNS
Content/topics discussed	- Consultation on Development of IAB - Curriculum development - Apprenticeships - Joint skills training	- Apprenticeship opportunities for cadets - Capacity building for IAB members - Discussion of new technology in commercial shipping	- Consultation on IAB structure - Development of structured logbook for tourism internships.	- Consultation on Development of IAB. - Plan IAB activities - Explore collaboration between PPNS and IAB - Strengthen IAB role in anticipating PPNS status as BLU⁹ institution - To initiate development of national sectoral skills body in shipbuilding
Key outputs in addition to development of D4 curriculum	- Agreements for joint skills training with ATAK and ALFI - Development of MyInternship and TalentHub - 16 MOUs signed during the term of the programme.	- One IAB member was supported to become a recognized industrial lecturer (through the IMO model course 6.09 based on STCW. STCW = Standards of Training, Certification and	- Structured logbook - 16 MOUs signed during the term of the programme	- Development of LSP3¹⁰ - Identification of progression pathways for SMK students - 30 MOUs signed during the term of the programme
		- Watchkeeping - the International Convention on training for Seafarers) - 5 MOUs signed during the term of the programme		

⁹ BLU - Badan Layanan Umum . A state institution is given a BLU status where they are authorized to generate incomes from the public (e.g. through organizing training).

¹⁰ LSP3 - Lembaga Sertifikasi Profesional Pihak Ketiga is a professional certification institution established by professional associations that aim to conduct professional assessment and certification for individuals or employees.

The IABs each began their development journey by focusing first on consultations about the establishment of the IAB, and then by facilitation discussions and inputs relating to the D4 programmes in development. During the process of the pilot programme a total of 67 MOUs signed with industry partners through the IAB structure.

Outside of the prescribed remit of the SfP programme, the IABs were encouraged to set further priorities and initiatives, based on the skills priorities identified through the meetings. The examples below indicate the skills bottleneck identified, along with the collaborative solution that was implemented.

In Polibatam's IAB, discussions identified an unmet need for customs qualifications, which they later implemented through SfP as a response. Based on observations that graduates sometimes lacked soft skills and relevant knowledge, industry participated in the development of project-based learning briefs that incorporated real industry challenges into the teaching and learning environment. To improve the study-to-work transition and to help industry identify graduates with the skills they need, two digital platforms were developed and piloted: TalentHub provides a searchable database of student competencies that can be accessed by industry for internships or recruitment; while MyInternship provides an online platform for students, industry mentors and teachers to share

information as the student progresses through their internship placement.

Polimarin's IAB focused on the new technology challenges in shipping and identified an industry professional who could be trained through IMO standards to be able become an industry lecturer for the polytechnic.

The PPNS IAB approached local shipbuilding skills needs from a lifelong learning perspective. It had been identified through engagement with SMKs in the province that progression to D3 study programmes at PPNS were unattractive due to the repetition of curriculum content. Through inputs from the IAB, new 'fast track' versions of the study programmes were developed as a more attractive progression pathway for these students.

The PPNS Advisory Board also identified that shipbuilding alumni could be better supported in their careers through recertification issued by an LSP¹¹. The LSP3 is now being established through the IAB and will be hosted through IPERINDO.

These different collaborative initiatives give an indication of the diversity of challenges and solutions that can arise from the structured social dialogue between industry sectors and TVET institutions through the IAB model.



December 2022: Polibatam launch TalentHub and MyInternship, supported by the Logistics and International Trade Industry Advisory Board, KADIN and MoECRT.

¹¹ LSP3 - Lembaga Sertifikasi Profesional Pihak Ketiga is a professional certification institution established by professional associations that aim to conduct professional assessment and certification for individuals or employees.

Enabling factors and challenges in establishing IABs

Enabling Factors

The following discussion is a synopsis of observed enabling factors and challenges to the establishment, development, and sustainability of IABs within Indonesian polytechnics.

The MoECRT policy direction of Link and Match encourages polytechnics to link with industries for the purposes of improving education and training provision, to support the flow of higher quality graduates with relevant skills needed by industry. The model includes improving curriculum, building teaching capacity, resource sharing (teachers, facilities, equipment, intellectual capital, etc), facilitating apprenticeships, encouraging joint research and other modes of collaboration.

The SfP programme supported the institutionalization of this model through the development of IABs. This began with capacity building for polytechnic Directors and senior leaders in 2020 through the ITC Turin e-learning course entitled *Sectoral Approaches to Skills Development: Prioritization, Definition and Collaboration*¹². The capacity building was important to ensure that the polytechnic leadership understood key principles, and could contextualize the implementation of the model in their polytechnic.

The personal leadership of Directors in establishing IABs can be considered a critical success factor, as this signals the importance of the relationship for both polytechnic staff and industry representatives. Further, research on the participation of industry representatives in the skills system clearly shows the link between willingness of industry representatives to give their time, and the extent to which they feel their contribution is valued and will make a difference.¹³

The alumni of the polytechnic now working in relevant local industry are an important enabling factor for initial development of effective IAB membership. By definition, alumni will have a direct experience of both the polytechnic and their current workplace as well as the progression journey into employment. As such, they are well placed to relate the 'gaps' between the skills supplied through their institutions, and those they needed to acquire for their transition to related employment. To some extent they will also be able to 'speak the language' of both institutions, which can be particularly helpful in early meetings.

Due to their affinity with both organizations, alumni are often instrumental in establishing or developing progression pathways between the polytechnic and their current employment. In each of the four polytechnics, alumni relationships have supported the IAB establishment and development, and in the case of the PPNS IAB, the ongoing professional needs of the institutions' alumni has resulted in the establishment of the LSP3.

The learning from the pilots shows that placing a high value on the time given by industry representatives is critical to the effective running of an IAB. Scheduling for the industries' convenience, and ensuring meetings are well run to set times, with clear agenda points and follow up notes not only help to maximize the time given by the membership, but are also clear signals to industry that the polytechnic is well run and managed, and capable of producing graduates who are ready to respond to an industrial setting.

Early engagement and collaboration with strategic/ large industry partners and industry representative organizations contributes to the formation of IABs and supported them in establishing credibility in their formative stages.

ATAK, ALI, ALFI for Polibatam, CIMA at Polimarin, and IPERINDO for PPNS, have each provided a relevant industry network, with experience in the governance arrangements needed to run such a representative organization successfully. In some cases, members have been convening together for many years, which provides a head start in helping members to conceive of issues 'on behalf of their membership' rather than as individual firms. This is an important distinction, which without the support of industry representative bodies can take some years to develop within an IAB.

Similarly, the support of large or high-profile industry partners early in the formation of the IAB can help to signal the legitimacy and credibility required to inspire the support of other industry partners in the sector. PT Pal for PPNS and Infineon for Polibatam are examples of this. Large / high-profile industries of this nature (including State Owned Enterprises and International Companies) often have a well-developed understanding of their industry's operating context and a helpful network of influence in government, regulatory bodies and international supply chains amongst other categories.

The support of large industries is compelling to medium-sized industries who may otherwise feel that the supply of skills is outside of their sphere of influence.

¹² ITC Turin e-learning course on Sectoral Approaches to Skills Development. Available: <https://www.itcilo.org/courses/e-learning-course-sectoral-approaches-skills-development>

¹³ ILO, Employer organizations in the governance of TVET and skills systems, 2020

Challenging Factors

Many of the challenges experienced in establishing or developing the IABs in the SfP programme are common to all models of industry engagement in TVET systems worldwide.

Convincing industry representatives that attending an IAB meeting is a good use of their time is both an initial and a perpetual hurdle. Before committing support in principle, the industry decision-maker will need to be conceptually confident that a dialogue with their TVET institution has the potential to result in a tangible improvement in the flow of talent to their organization within an acceptable timeframe.

There are many reasons why this logic flow may be different for industry executives. For example, they may not have information to hand about the skills gaps within their organization, or they may be accustomed to responding to skills gaps in ways that do not address the supply of skills from TVET, such as outsourcing, short-term contracting, or utilizing government training to upskill their existing workforce.

Engagement with the IAB also requires industry representatives to have a certain level of confidence that TVET providers have the capability, motivation and regulatory scope to respond quickly and effectively to the talent shortages they are experiencing.

These factors all need to be considered and addressed in attracting IAB membership. It is not unusual that members need to be engaged multiple times before they will offer their commitment.

Where industry representatives have made the commitment to support the IAB, there may be many and frequent reasons why the individual cannot attend meetings in person. These may include compulsory meetings, other priorities set by superiors, unexpected problems requiring their urgent response, deadlines or just the weight of the workload on a given day – all of which are regular occurrences for industry professionals and business owners.

Thus setting a time, date and location suitable for all is rarely reached and a degree of compromise is usually needed on both sides. There are various approaches to this including holding some meetings outside working hours; incentivizing through an interesting location, including a good breakfast/lunch; using the ‘retreat’ approach of taking a whole day or number of days at a location outside of the local urban centre; or stating

that membership is subject to attendance at a minimum number of meetings each year.

None of these will work for all IAB members at all times, and a degree of change in membership from one meeting to the next is to be expected.

Building Capacity

In the Skills for Prosperity pilots, both polytechnic and industry representatives took considerable time to understand the concept of the IAB, even in the cases where industry relationships were well-established.

At the start of the pilot process, most industry representatives would have been unfamiliar familiar with the Industry Advisory Board concept, and few would have had prior understanding of TVET components such as the curriculum development process, apprenticeship structures, and working with SKKNI¹⁴.

Polytechnic staff too, often need to become more familiar with the culture and language used by their industry counterparts, as well as the dynamics of skills supply and demand for these industries.

For this reason, a capacity building process is required for the effective establishment of an IAB. In Skills for Prosperity, this was provided for polytechnic leaders through the ITC Turin e-learning course entitled: “Sectoral Approaches to Skills Development”, through knowledge sharing between the four polytechnics, and through frequent international knowledge sharing events, such as the ILO’s 2020 webinar: Promoting industry-led skills and TVET systems in Asia: The Role of Sector Skills Councils¹⁵.

Many IAB members took part in other Skills for Prosperity initiatives, such as the development of sub-sectoral skills analysis in seafaring, shipbuilding and international logistics, which took place through a series of workshops in 2022, in collaboration between ILO and the Coordinating Ministry of Maritime Affairs and Investment. Several IAB industry representatives also undertook the more technical ILO e-learning programme in 2023 entitled: *Measuring Skills Mismatches: Understanding how to measure and analyze skills mismatches from both supply and demand sides*¹⁶.

Even with this additional support, it is important to note that IABs and the discussions that flow from them take time to mature. In particular, it takes time for industry to understand the regulations and processes that underpin the TVET system, at least to the extent necessary for effective discussion; and equivalently, it

14 SKKNI - Standar Kompetensi Kerja Nasional Indonesia, National Occupational Competency Standards

15 ILO webinar, 2020, Promoting industry-led skills and TVET systems in Asia: The Role of Sector Skills Councils

https://www.ilo.org/asia/events/WCMS_756127/lang--en/index.htm. Note that although Sector Skills Bodies usually operate at the national level, many concepts and principles are equally relevant to IABs operating at the institutional level.

16 ILO ITC Turin E-learning programme, 2023. Measuring Skills Mismatches. Available: <https://extranet.itcilo.org/promotionbanners/brochure-epap>

takes time for polytechnic representatives to develop the familiarity with industry terminology and concepts needed to effectively enhance their curriculum and teaching practice.

There is also a level of institutional capacity that needs to be developed and accommodated within polytechnics. Establishing and maintaining an effective IAB requires regular scanning to identify new start-ups or inward investments in any growth sector, and networking and outreach to reach these new industries and representatives. The ongoing availability and commitment of key polytechnic staff is important. Whilst some turnover in industry membership is expected, all efforts should be made to keep polytechnic membership constant. If industry members need to explain the same concept or make the same point at consecutive meetings, they will quickly lose confidence that their participation is worthwhile. Membership and senior participation will quickly decline, and once this credibility is eroded it is difficult to restore.

There is a need to provide secretariat services for the IAB - and ensure that agreed actions on the part of the polytechnic are carried out. The professionalism and good communication of the secretariat will play an important role in establishing the credibility of the forum.

Finally, there are expenses associated with the IAB models described here. These include the initial capacity building, and the costs of hosting several meetings per year, although we note that if meetings are held on campus these expenses can be minimized.

Summary of Benefits

As the Skills for Prosperity IAB pilot has shown, the benefits for industries, polytechnics and the wider skill system can be far ranging. The following are a selection of the more common benefits experienced.

Benefits for Industry

- ▶ Providing inputs that help provide graduates that meet their needs, which can lead to reduced time and costs of recruitment; and reduced early attrition caused by skills mismatches.
- ▶ Localized networking within their industry sector.
- ▶ The opportunity to leverage collective outcomes that may not be viable for individual firms.
- ▶ Professional development of their staff

Benefits for Polytechnics

- ▶ Professional development of polytechnic leaders and teaching staff.
- ▶ Improved curriculum, increased internship placements, increased graduate progression to skilled employment.

Benefits for Ministry of Education, Culture, Research and Technology

- ▶ Institutionalization of Link and Match.
- ▶ Provides visibility of all MOUs made through this forum.
- ▶ Provides systematic upskilling of teaching staff as relevant to the skills required by industry.
- ▶ Provides assurance that industry input is representative of the sector, reducing the risk that a single powerful employer dominates the agenda.
- ▶ Provides a channel of industry feedback that can be used to support or inform new curriculum interventions or capital investments

Learning and good practice from the piloting of Industry Advisory Boards

- ▶ Set a clear vision and mission for the IAB with a clear definition of the industry sector in scope. Ensure this is well understood by polytechnic teams before industry is engaged.
- ▶ Aim to link with professional industry associations such as IPERINDO, CIMA, ALFI, ALI etc. These will not only have a database of members, but also some experience and credibility of convening the membership. Local branches of KADIN and APINDO may also provide support.
- ▶ Directors should lead, at least in the early stages of formation. The pilots show that the visible leadership of the Director is critical to attracting suitably senior industry representatives and providing confidence that their inputs will be heard by someone who has the authority to make changes. This also provides an important signal to staff that industry engagement and development of a demand-led curriculum is a strategic priority for the polytechnics.
- ▶ Observe good governance practice. For example, meetings to be scheduled with agenda at least one week in advance, minutes and actions from meetings to be circulated shortly after meetings.

- ▶ Treat the IAB as a starting point for engagement rather than a goal in itself. Seek other opportunities to invite selected Industry Partners to the campus or request advice, for example student awards, or to input in design or upgrade of polytechnic facilities.
- ▶ Use members' time effectively. For example, engage senior executives only for strategic-level discussion, and encourage industry to assign technical staff and line managers for detailed inputs on curriculum, apprenticeships, etc.
- ▶ Establish working groups for projects that are not relevant for the whole advisory board
- ▶ Propose a standing annual meeting for all members
- ▶ Allow for some rotation of membership. For example, start each meeting with introductions, a clear statement about the purpose of the meeting, and a recap of the previous meeting. This is one reason why good record keeping is important.
- ▶ Minimize unnecessary technical language
- ▶ Empower staff of polytechnics to engage with industries
- ▶ Create a sense of shared ownership in as many ways as possible.
- ▶ IABs to be considered as standard practice for the development of new study programmes, campus investments in teaching facilities or establishment of new polytechnic campuses.
- ▶ External Relations or International Relations offices to be upskilled in facilitating IAB development in their institutions.
- ▶ Funding allocations to support or incentivize IAB development and ongoing activities.
- ▶ Publication of guidance, including templates for polytechnics and the implementation of reporting templates to monitor activity and contribute to ministerial planning.
- ▶ Periodic capacity building for Directors, especially those who are newly appointed. This could be carried out annually at a central location.

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Policy considerations

The following are further suggestions for policy consideration, based on the pilot activities undertaken:

- ▶ Make provision for IAB structures in regulations – permitting the practice, socializing the concept across Polytechnics, providing guidelines and tools such as template ToRs, governance guidelines etc.

Annex: Template IAB Terms of Reference



International
Labour
Organization

TERMS OF REFERENCE International Labour Organization - Jakarta

UK Skills for Prosperity (UKS4P)

Industry Advisory Board

Industrial Advisory Board (IAB)

The role of the Industry Advisory Board serves to support the polytechnic in ensuring quality and relevance of polytechnic graduates through consultation on the learning process, curriculum, the learning outcomes, learning facilities and industry knowledge of the teaching staff.

The specific role of the Industrial Advisory Board is as follows:

1. Provide inputs for the polytechnic's study program curriculum, educational objectives and learning outcomes.
2. Collaborate in student recruitment for apprenticeship programs and full-time employment
3. Provide support in expanding and strengthening relationships with relevant partner industries
4. Provide advice regarding issues related to research
5. Participate in the polytechnic's review and evaluation of strategic goals, plans, and new initiatives

Membership

Membership of the Industrial Advisory Board is by invitation from the polytechnic Director. Selection of members is based on the relevance of a particular industry sector to the program and the industry's interest in contributing to the study program's objectives.

Membership may include alumni of the polytechnic and new members may be nominated by members of polytechnic study program or by any member of the IAB.

The industrial advisory board consists of approximately 10-15 members. Members serve one-year terms and may be reappointed.



Chairship

The Chair of the Industry Advisory Board is appointed by the Polytechnic Director for a period of one year and may be reappointed.

Meetings

The Industry Advisory Board meetings are held a minimum of twice per year. Meetings are organized for a half day and are scheduled before hand to avoid conflict with other responsibilities. Additional advisory board meetings can be held as required. Working groups may be established for specific areas of work, these should report into the regular IAB scheduled meetings.

Secretariat

As the secretariat for the Industrial Advisory Board will be facilitated by the polytechnic. The secretariat will prepare the meeting agenda in consultation with IAB members and will maintain and distribute accurate records of the discussions. Resource persons from other institutions may be invited to the meetings depending on the agenda items, however, the meetings of the IAB will be closed and not open to the press or public.
