

Original citation:

Behle, Heike. (2017) Developing vocational competences during secondary school? European Journal of Training and Development, 41 (1). pp. 39-49.

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Developing vocational competences during secondary school?

Introduction

In recent years, many employers have criticized secondary schools as not teaching sufficient transferable skills (see for example European Commission, 2011). Employers emphasised the importance of social or behavioural issues (Winterton, 2009) which should help young people to smoothly enter the labour market. In a recent publication, Bell and Blanchflower (2011) discussed the effects of the current recession on young people's chances on the labour market. Reasons for young people's disadvantages on the labour market include fewer contacts with employers; less experience in finding work; less work experience and skills and competences in general and, on the internal labour market, less specific human capital relevant to the particular employer. Additionally, streamlining of the workforce due to the technological change can result in significant disadvantages for the unskilled youth as labour market regulations make it easier to cut young workers (*ibid.*).

Traditionally, 'academic' secondary school education and vocational education and training (VET) were conveying different kinds of competences: Secondary school education tended to concentrate on more academic, knowledge-related subjects and thus students were able to acquire cognitive competences. Young people engaged in VET tended to learn more functional and social competences such as technical skills and work-appropriate behaviour (Shavit and Mueller, 2000).

An early introduction to vocational education and training, however, could give young people a head start in their vocational or higher education and help them overcome disadvantages on the labour market. Based on these universal discourses, the International Baccalaureate Organisation (IBO) has introduced a new secondary school qualification called International Baccalaureate Career-related Programme (IBCP). The new qualification has been described as innovative education framework for students aged 16 to 19, specifically tailored for students who wish to engage in career-related learning (IBO website). It is built around three interconnected elements: at least two Diploma Programme courses covering academic subjects; an IBCP core that includes approaches to learning, community service, language development and a reflective project; and an approved career-related study. The aim of the IBCP is to provide students with both an academic and practical foundation, and to support their further studies and specialized training. The IBCP attempts to overcome the traditional division between secondary school and VET in a way similar to Grubbs' (1999) argument in which he identifies education and training programmes as successful if they combined academic education, occupational skills and on-the-job training together with links to further education providers and employers. Students are expected to acquire knowledge as well as skills and social competences which can be employed in an occupational setting and/ or during further vocational studies either in college or higher education.

This paper evaluates the skills and knowledge young people gained from an IBCP in the context of their occupational ideas and their current activity. It is aimed at international experts to improve an understanding of the opportunities an amalgamated secondary school degree holds. In order to do so, first the IBCP is discussed, following by a discussion of the theoretical backgrounds of the potential of an amalgamation of secondary school and VET both in human capital theory and in a

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2
3 social mobility perspective. Using mixed methods findings based on a survey of 'the IBCP class of
4 2014' and qualitative interviews of twenty IBCP leavers, IBCP students careers' decision making and
5 their skill and knowledge gains are discussed in the background of their current activity. The
6 conclusion identifies and discusses the advantages and the risks of an amalgamated secondary
7 school and VET.
8

9 Amalgamation of secondary school and VET

10 **The International Baccalaureate Careers-related Programme (IPCP)**

11
12 The IBCP is an example of an amalgamated academic and VET secondary school degree as it
13 combines both academic and vocational subjects to gain an internationally-recognised education. It
14 aims to integrate academic and practical learning in a rigorous way and develops skills and
15 competencies required for life-long learning. The IBCP was promoted by the IBO as an ideal course
16 of study for students looking to pursue a range of pathways because they could combine academic
17 subjects with their interests and skills; it offered a wide range of career options; students can
18 develop languages and cultural skills together with other essential life skills such as critical thinking,
19 communication and personal development; and they could become independent learners (Source:
20 IBCP poster). Students were awarded an IBCP if they completed (a) An accredited career-related
21 study; (b) At least two IB Diploma Programme courses ; (c) a Reflective Project; (d) community and
22 service programmes; (e) foreign language development; and (f) an 'Approaches to Learning' course
23 (IBO 2014).
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30 Different ways exist to evaluate vocational training whether it is included in a generic secondary
31 school, a stand-alone school-based vocational training, or whether it is based with an employer.
32 Possibilities to evaluate vocational training includes the earnings young people receive after their
33 training (Meer, 2007), their chances to enter prestigious occupations, and or whether vocational
34 training can prevent unemployment or precarious work (Shavit and Mueller, 2000). In the case of
35 the IBCP evaluation, within its particular setting, we concentrated on skills and knowledge students
36 gained and graduates' activities after their secondary school degree.
37
38

39
40 In general, there are two perspectives from which the impact of vocational training on career
41 pathways are discussed: A human capital perspective, and a social mobility perspective (Shavit and
42 Mueller, 2000).
43

44 ***Human capital perspective***

45
46 Vocational training, from a human capital perspective, will increase individuals' chances on the
47 labour market if their skill-gains is expected to improve their productivity. Compared to untrained
48 applicants, vocationally trained applicants are in higher demand and thus their chances of gaining
49 employment and decent wages are enhanced (Shavit and Mueller, 2000). In this context, vocational
50 training is an effective means of supplying national manpower skills needs (Neuman and Ziderman,
51 1999). Educational attainment also functions in the reduction of socio-economic inequality and can
52 have a long-lasting impact. Vocational training guarantees substantial skill development to all but
53 the least able and motivated young people (Ryan, 2003). Social competences acquired in the
54 workplace, together with academic skills and knowledge, are expected to smooth young peoples'
55 transition either directly into work, to learn in skill-appropriate employment or an apprenticeship or
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3 to enter further vocational or academic training in further or higher education (Levels et al., 2014).
4 It is also expected that young people gaining vocational skills are more motivated as they learn in a
5 contextualised environment, compared to those learning academic skills in a more abstract setting.
6 “The first is cognitive: students may find it easier to understand an idea or a theory when it is taught
7 in a practical context. The second is motivational: students may try harder to learn a theory or a
8 formal technique when it is taught in a practical context” (Ryan, 2003:149). Additionally, VET is seen
9 as a means to reduce drop-out rates to secondary schools; as an appropriate educational alternative
10 to general secondary schooling for students of weaker academic ability; and as a potential to
11 improve the circumstances for unemployed or vulnerable young people (Neuman and
12 Ziderman,1999).
13
14
15

16 Depending on the fit between the occupational skills and subsequent job (Bishop, 1988), or on the
17 transferability of more generic skills, vocational education and training may be an important function
18 of secondary schools in this perspective.
19

20 ***Social Mobility Perspective or ‘tracking’***

21
22 Another perspective discusses vocational training in the context of social mobility. Students who
23 attend vocational training are usually from lower social classes. Compared to those who enter an
24 academic track providing for higher education exclusively (Kreisman and Stange, 2014), VET offers
25 students a more restricted curriculum and they are less likely to take advanced courses. Teachers
26 devote less time to individual students, and instructions are conducted at a lower level of intellectual
27 complexity resulting in lower achievement of students on average (Shavit and Mueller, 2000). The
28 lower level of education students receive indicates to students that “they are less worthy, which in
29 turn dampens both their expectations of what they can achieve and their aspirations for the future”
30 (*ibid.*, p. 30ff). VET has been criticised as being ineffective and/or a preparation for dead-end jobs
31 (Kreisman and Stange, 2014, Meer, 2007).
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36 ***Discussion***

37
38 However, both of the perspectives do not seem to be as ambivalent as they first appear. Using
39 multivariate regression models, Meer (2007) finds some evidence that if students can chose their
40 track they will benefit from their choice. Many young people from working-class background require
41 a career path which can both minimize risk and yield a qualification that would secure a decent job.
42 Shavit and Mueller (2000) stress that to them, it matters little that VET also diverts students away
43 from the professions since those might not realistically be part of their realm of possibilities.
44
45

46 Undoubtedly, the success of an amalgamated VET and academic school qualification is whether
47 young people are able to transfer the specific skills and knowledge gained to their post-secondary
48 activity. When looking at young peoples’ career planning, it is important to bear in mind that this is
49 a long-term process and that many factors influence their career choices (see for example, literature
50 review in Hodkinson and Sparkes, 1997, Bimrose and Barnes, 2007, Walther et al., 2015). Gender,
51 age, students’ social capital, their individual personality, peers and the school, amongst other impact
52 factors, all play a role in young peoples’ careers decision-making processes. In general, students also
53 consider human capital consequences of their career choices in the specific labour market context
54 (Kreisman and Stange, 2014). However, it is important to bear in mind that the individuals’
55 personality has implications on their career-decision making style (Bimrose and Barnes, 2007). Thus,
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3 it seems vital that young people embark on their career-decision making process before entering the
4 IBCP in order to select the skills which can then be transferred to specific post-secondary
5 employment or training. In this context, it is important to identify what kind of skills young people
6 should learn during high school. Is the goal of the occupational component the acquisition of
7 occupation-specific skills, career awareness, or basic skills (Bishop, 1988, Kreisman and Stange,
8 2014)? The individual fit of the acquired skills to the specific jobs can produce economic benefits
9 (Bishop, 1988), however, the skills gained might also allow for mobility between occupations (Shavit
10 and Mueller, 2000). Another relevant question concerns the information needs and careers
11 guidance of young people before making their career choices.
12
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15 These discussed perspectives, human capital theory and social mobility, have implications on the
16 signals young people convey when applying for employment or further training following their
17 secondary school qualification. Following human capital theory, employers might prefer applicants
18 holding specific vocational skills relevant to the jobs. These applicants will require less on-the-job
19 training, and can be productive soon after they are hired (Shavit and Mueller, 2000). In support of
20 the human capital approach, Mane (1999) indicate that value of vocational education among non-
21 college-bound students had increased over time. Bolli et al., (2015) questioned whether school-
22 based VET programmes might not succeed in accounting for the demand of the labour market
23 and/or signal the acquired human capital of young people to the employers. Alternatively, following
24 the social mobility discussion, students from the vocational track might signal that they are not as
25 capable as those from an academic track. A vocational track placement at the secondary level
26 reduced students' chances of going on to college and subsequently entering professions and high
27 prestige occupations (Shavit and Mueller, 2000).
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32 **Research questions**

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34 These initial theoretical approaches in which VET provided during secondary school can be seen in
35 two ways: As a provider of essential skills to help ease the transition of school-leavers to vocational
36 training, employment or higher education or as an indicator of low-level attainment of students.
37 The reputation of the IBCP as a secondary school degree from the highly established *International*
38 *Baccalaureate* brand might erase the negative image of the VET. The vocational element of the IBCP
39 would then signal high level skills and knowledge rather than low-level attainment. This led to the
40 following research questions:
41
42

- 43 - When did IBCP students take their careers decisions, and which role did the IBCP play in this
44 context?
- 45 - What kind of skills and knowledge did they gain whilst studying for an IBCC?
- 46 - Did the students think that these skills and knowledge were transferable to their post-secondary
47 activity?
48
49

50 **Data and Methods**

51
52 In order to prepare the data collection, all 38 schools offering the IBCP in 2014 were contacted, and
53 enquiries were made about their graduates. Altogether, 339 students were found all of whom were
54 contacted and invited to take part in the online survey, either by the researchers or by the schools
55 themselves.
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Using a mixed methods design, a quantitative survey of 62 IBCP graduates and qualitative in-depth interviews with 20 students were carried out, mainly with students from the USA or the UK, but also with those from other countries such as Germany or Finland.

Qualitative interviews were taped with the students' agreement. Interviews were conducted in a structured way, following an interview schedule comprising several main themes subdivided into subthemes. The interviews were transcribed, and responses were coded as snippets of text into themes. The most appropriate quotes were selected to illustrate the findings. All of students' names are aliases to protect respondents' identities.

Findings

Careers-Decision making

Students' career-decision is a process in which factors such as gender, age, students' social capital and their individual personality play a crucial role. In order to identify and acquire the suitable skills and knowledge during the IBCP it was seen as crucial that the careers-decision making process started before embarking the qualification. With regards to the time students embarked on, and the role the IBCP played in the careers-decision making process, three different groups of students could be distinguished: Those who said that they did not want to plan their careers; those who planned their careers before embarking on the IBCP; and those who used the IBCP to explore vocational career options.

Students who said that they did not want to plan their careers were rare in the sample, two students from the qualitative survey could be identified as belonging to this group. Both students were male. These students stressed that they did not like to plan their careers and that they did not feel under any kind of pressure to do so.

I had fun [at the IBCP], and, I am still not sure what I want to do later, but ... it is okay. (Frances)

I don't plan my future so much, because I don't like to plan things a lot. I just do them and think about them later. I don't know, yet. (...)I haven't really thought about it, you're asking difficult questions! (Simon)

However, despite his outspoken reluctance to actively plan his career, one of these students, Frances, pursued with his careers decisions. He took his IBCP career-related study in management, and now studies a management-related course at university.

Four students were very clear about their career choices before embarking on the IBCP. They decided early on about their future occupation and were very clear in their career choices. Using the Bimrose and Barnes (2007) typology, they can be described as either evaluative or as strategic careerists. Whilst evaluative careerists are characterised by a 'process of self-reflective evaluation' with an open-ended results, strategic careerists 'identified their ultimate career goal and were making quite conscious decisions that were directly related to formal employment' (*ibid.*). The differences between both groups are not reflected in great detail in the IBCP data, as students usually identified their chosen career paths rather than their ultimate career goal and found out whether the IBCP was a suitable means to get there.

1
2
3 *I definitely knew I wanted to do business and creative industries which is still*
4 *what I'm doing now. (Anna)*
5

6 *I decided I wanted to be a nurse. Half way into middle school I decided I wanted*
7 *to work in health care, and I wanted to help people in need. I volunteered at*
8 *different organisations and nursing homes; I really wanted to help someone else.*
9 *That's what made me want to pursue a nursing career. (...) (Ellie)*
10

11 *Yes, I have been interested in business since year nine, and I always knew I*
12 *wanted to do it at University. (Isabel)*
13

14 These students found the IBCP suitable as it allowed them to specialise early in their chosen career
15 paths. They engaged with the career-making process early on and gained information to test the
16 compatibility of the IBCP with their chosen career paths. The IBCP was instrumental for these
17 students to acquire vocational skills and knowledge which could give them a head start in their later
18 studies and subsequent employment.
19

20
21 *I actually asked at my first meeting with [the provider of the Career-related*
22 *study], if I did this [IBCP] course, can I do a dual degree, because I wanted to do*
23 *the business component as well, and they said definitely, and gave us a choice of*
24 *three different dual degree so that we could do together with creative industries.*
25 *(Anna)*
26

27 Ryan, who now studies architecture, summarised it as follows:

28
29 *If you knew where you wanted to go in the future, you could pick the IBCP, and it*
30 *will direct you more towards a career. (Ryan)*
31
32

33 Finally, the last and largest group of IBCP students had used the IBCP as a form of decision making.
34 During the IBCP, especially during the career-related study and internships, they gathered
35 information about potential career paths and they could try different occupational roles which
36 would help in the career-decision making process. Students identified the IBCP as suitable for their
37 decision-making process as it offered a variety of career-related choice (in some schools), was
38 flexible, and, in some cases, offered internships in various sectors. Students could try out different
39 options and were able to take their time to make their decisions as they only had to concentrate on
40 a small number of academic subjects.
41
42

43
44 *I thought [the economics class at the IBCP] was really interesting, that's why I*
45 *want to do business in the future. Because I liked learning about the economy,*
46 *really interesting how we, the people, make the economy and the businesses.*
47 *(Jonathan)*
48

49 *I really haven't a dream job but coming into my junior year, IBCP program has*
50 *assisted me and figured out what I want to do (...) I decided to take a marketing*
51 *course and from there I just felt like the creative aspect of marketing would just*
52 *be really something fun, it is a little fun program that I enjoyed to do that and I*
53 *thought "Wow! [If I can] make money after this why don't I try to get a degree in*
54 *that?" (Finlay)*
55

56 **Skills**
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Based on their career-decision making processes, the second research question refers to the kind of skills students gained during their IBCP. According to the survey, students were more likely to gain *classic* academic skills rather than careers-related skills; they were less likely to state that they gained skills for specific industry-related employment and also less likely to gain soft, transferable, skills (figure 1).

Figure 1

As discussed earlier, the IBCP was introduced to overcome the distinction between academic knowledge-related subjects (cognitive competences and skills) and functional and social competences. This paper uses the three components of competences (knowledge, skills, behaviour) based on Winterton (2009). The following section clarifies how students saw the competences and skills they gained and their applicability in their current activities.

Students commented on the cognitive competences (knowledge) they gained during their IBCP. When speaking about the knowledge they gained, they mentioned subjects such as Maths, Physics and English, or the knowledge gained from their career-related study, such as Business Studies. Many non-native speakers of English commented on the way in which their English language vocabulary and grammar skills had improved.

Many students stated that they had improved their functional skills such as language skills (English), communication skills, professional writing skills and critical thinking. They reported improvements in their confidence, and how especially the need to present in front of their classes had developed their personality. The following quote explains how Eric improved his organisation and time management skills.

We also learnt time management, organisational skills, because we had a lot of time for the reflective project, but we had to organise ourselves. And in the end, if you didn't work, there was no way to finish. (...) It was very tough because we had two months to work on it in the first year and then we kind of forgot about it. We did a lot of other stuff while we were still supposed to work on the project, and then we had to work on it again in the last year. (Eric)

Besides to cognitive competences and functional skills, students such as James also referred to their increase in social competences.

In the beginning we had issues with respect by the students towards the people working there, a lot of boys are really close minded and immature, arguing with a trainer, just been pathetic, and you could see the difference in a few months. (James)

Use of skills and knowledge

Whilst the IBCP qualification was designed for both future apprentices and higher education students, just over half of the IBCP students (53 per cent) entered higher education after their degree. Seven per cent of all survey respondents reported that they were in employment related to their skill path, and 21 per cent were engaged in casual jobs. The remainder were engaged in apprenticeships or vocational training (3 per cent), unemployed (11 per cent), or doing something else (5 per cent), such as compulsory military service or long-term holidays. The following section

1
2
3 concentrates on the IBCP students' transferability of skills and knowledge to higher education
4 courses, vocational training or skill-appropriate employment.
5

6 The majority of students remained in their chosen career paths and managed to apply the
7 knowledge, competences and skills acquired during their DP courses in their higher education.
8 Students highlighted that they had the 'upper hand' (Isabel) or 'a great edge' (Anna) as they already
9 knew about the course content and were prepared for a larger workload. They described that they
10 had gained research skills as a part of their secondary degree.
11

12
13 *But with all the maths and English skills that I gained it has really helped me a lot.*
14 *I still have to do functional skills at college but with the skills that I have already*
15 *learnt that the IBCP, it's much easier. (Victoria).*
16

17
18 They explained that they felt well prepared for assignments and knew how to write and submit
19 essays. Few others, however, were not content with the way in which the IBCP had prepared them
20 for higher education, as the following quotes demonstrate. These students felt disadvantaged
21 compared to those who gained a traditional IB qualification, especially in terms of their research and
22 writing skills. They felt that they did not get prepared for higher education as they felt educated to a
23 lower-level of complexity compared to IB Diploma students, especially in their research skills.
24
25

26
27 *It is an aim that you can enter higher education after the IBCP, but we really did*
28 *not get prepared for that (...).For example, with homework. For essays, or so, we*
29 *could just take one website and copy the content. (Frances)*
30

31 *[At my college], I had to learn nearly everything from scratch (i.e. how to study*
32 *smarter, how to create an effective study schedule, how to manage a difficult*
33 *workload). (Survey respondent)*
34

35
36
37 Nine students from the survey and qualitative interviews were engaged in employment related to
38 their career path. One of them who had undertaken his IBCP in a different country and returned to
39 his home country afterwards explained how he utilised both his English language skills and his
40 cognitive and functional competences.
41

42
43 *Here in [country] less people talk English and people talk with really bad accents*
44 *and it's very hard to understand what they want to tell. [My employer] really*
45 *likes the idea that I film in English and I got other jobs because of that. (...) They*
46 *were British and Americans and they needed assistants who can speak fluent*
47 *English and I was one of their assistants. (Stephan)*
48

49
50 Most students entered higher education courses similar to their career-related studies. These
51 students explained how they could transfer their skills and their subject-related knowledge to their
52 higher education courses.
53

54
55 *The IBCP program for me was a good pathway into college for me because I was*
56 *able to transfer all the skills I got there into all my classes in college (Alfred)*
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3 Only a few of the students changed their career paths, such as Victoria who, after an Art-related
4 careers-related study entered a vocational training in animal management, or Mark who took
5 culinary classes and now studies geospatial intelligence. However, the students who changed their
6 career path did not complain that they were not able to use the skills they had acquired. Victoria
7 said:
8

9
10 *So it allowed me to keep my options open so I can choose other things.*
11

12
13 Students used the career-related study as a 'test bed' which allowed them to try different
14 occupational ideas, such as Jenny described.
15

16
17 *It's a good program to do if you have a passion for something, you can "test run"*
18 *it instead of worrying about it later on in life.(...) you take a cooking class and*
19 *you don't like it, at least you have tried it out early instead of wasting money on*
20 *time later, by going to culinary school. (Jenny)*
21

22 23 Conclusion

24
25 This paper discussed the ways in which vocational and academic training can be amalgamated for a
26 joint school leaving qualification using the example of the IBCP. Previous literature has discussed the
27 combination of vocational and academic training either from a human capital perspective as an
28 additional unit of education which signalled higher productivity or, as a hindrance to social mobility
29 because young people from lower social classes were more likely to enter such a secondary school
30 programme. One important factor relating to skill transfer was seen in the fit between the studied
31 career-paths and the post-secondary school activity.
32
33

34
35 With regards to the timing of the career-decision making, three different kinds of students were
36 distinguished: students who did not want to decide on a career; those who took their decision
37 before embarking on the IBCP; and the majority who used the IBCP to test out their careers ideas.
38 According to the survey, young people were more likely to acquire traditional academic skills and
39 knowledge whilst specific industry-related skills were developed less often. It could be seen that
40 students acquired three types of competences (knowledge, skills, behaviour), and that many of them
41 were able to transfer them to their current activity, especially within higher education. Even those
42 who changed their careers ideas were able to transfer some kind of skills to their current activity.
43 Careers-decision making is a sequence of decisions (Hilmert and Jacob, 2003), and the decisions that
44 students took during their IBCP were only one of the first of many.
45
46
47

48
49 VET within a secondary school can, as discussed, send different kinds of signals to employers, or, as
50 seen here, to higher education institutions. VET may convey students' additional units of skills and
51 thus indicates increased productivity, in these cases, students will profit from their vocational
52 orientation. Alternatively, it may signal that students were not capable of learning academic skills in
53 which cases these students could be disadvantaged in their post-secondary school transition.
54

55
56 The presented research has opened up a third option. In a highly diverse higher education regime as
57 it exists in many countries (AUTHOR et al., 2015), many different pathways from higher education or
58 vocational training to employment are open to IBCP students. It could be seen that many young
59
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1
2
3 people holding an IBCP were more likely to embark on vocational higher education courses such as
4 nursing, management and even pilot training. Many of the students were not interested in entering
5 highest reputable higher education institutions.
6

7 The IBCP graduates, *per se*, do not signal a lack of capability in academic learning, however, they do
8 signal their vocational capability and their interests in a vocational pathway. Chillas (2010) has
9 proposed the idea of multiple matching where different types of occupations are contrasted with
10 different types of higher education institutions, and the graduates from lower-ranked universities
11 are matched to the often less prestigious, newer graduate jobs. The presented data could be used
12 to identify a different form of matching in which IBCP graduates, as well as other graduates from an
13 amalgamated VET and academic school programme, are matched with vocational courses in less
14 prestigious universities, i.e. the matching of applicants is adapted to existing higher education
15 courses. School-to-work transition, as indicated in these findings, is a highly diverse regime in which
16 school-leaving qualifications such as the IBCP can be met with appropriate higher education courses.
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References

AUTHOR et al. (2015)

Bell, David N. F.; Blanchflower, David G. (2011) : Young people and the Great Recession, Discussion paper series // Forschungsinstitut zur Zukunft der Arbeit, No. 5674, <http://nbn-resolving.de/urn:nbn:de:101:1-201105173104>

Bimrose, J. and S.-A. Barnes (2007) Styles of Career Decision-Making, *Australian Journal of Career Development*, Vol. 16, No. 2, pp.20-27.

Bishop, J. (1989). "Occupational training in high school: When does it pay off?" *Economics of Education Review* 8(1): 1-15.

Bolli, T., M. E. Egg and L. Rageth (2015). "Does vocational education and training improve market integration and job quality for young people?" preliminary quoted – permission need to be granted by the authors.

European Commission (2011) *Transferability of Skills across Economic Sectors: Role and Importance for Employment at European Level Luxembourg*: Publications Office of the European Union, doi: 10.2767/40404

Grubb, W.N. (1999), 'Lessons from education and training for youth: five precepts, in preparing youth for the 21st Century: the transition from education to the labour market', in OECD (1999): *Preparing Youth for the 21st century. The transition from education to the labour market* 363-378, Paris.

Hillmert, S. and M. Jacob (2003). "Social inequality in higher education. Is vocational training a pathway leading to or away from university?" *European sociological review* 19(3): 319-334.

Hodkinson, P. and A. C. Sparkes (1997). "Careership: a sociological theory of career decision making." *British journal of sociology of education* 18(1): 29-44.

IBO (2014) *General regulations: Career-related Programme* <http://www.ibo.org/globalassets/publications/become-an-ib-school/cp-general-regulations-en.pdf> (last accessed 31-07-15).

IBO Website <http://www.ibo.org/en/programmes/career-related-programme/what-is-cp/> (accessed 10-07-2015)

Kreisman, D. and K. Stange (2014). *Does Vocational Course-Taking Ease School-to-Work Transitions? a Dynamic Choice Model*. 2014 APPAM Fall Research Conference.

Levels, M., Velden, R.v.d., and V. Di Stasio (2014) *From school to fitting work: How education-to-job matching of European school leavers is related to educational system characteristics* *Acta Sociologica*, Vol. 57(4) 341–361

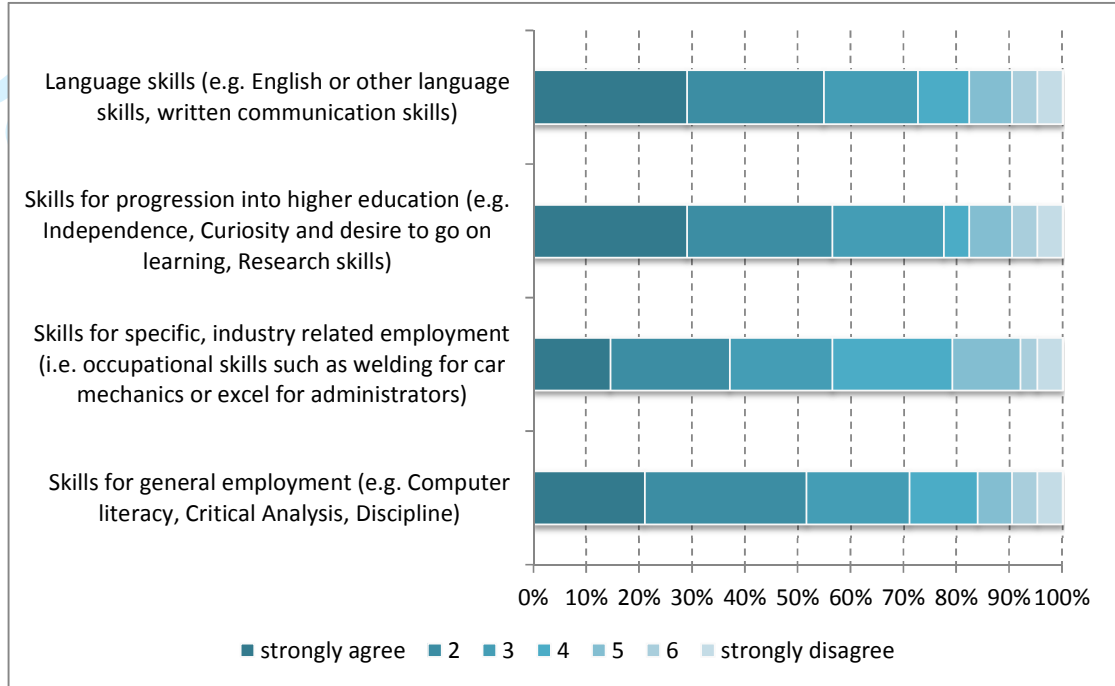
Mane, F. (1999). "Trends in the payoff to academic and occupation-specific skills: the short and medium run returns to academic and vocational high school courses for non-college-bound students." *Economics of education review* 18(4): 417-437.

Meer, J. (2007). "Evidence on the returns to secondary vocational education." *Economics of education review* 26(5): 559-573.

- 1
2
3 Neuman, S. and A. Ziderman (1991). "Vocational schooling, occupational matching, and labor market
4 earnings in Israel." *Journal of Human Resources*: 256-281.
5
6 Ryan, P. (2003). "Evaluating vocationalism*." *European Journal of Education* 38(2): 147-162.
7
8 Shavit, Y. and W. Muller (2000). "Vocational secondary education." *European societies* 2(1): 29-50.
9
10 Walther, A., A. Warth, M. Ule and M. du Bois-Reymond (2015). "'Me, my education and I':
11 constellations of decision-making in young people's educational trajectories." *International*
12 *Journal of Qualitative Studies in Education* 28(3): 349-371.
13
14 Winterton (2009) Competence across Europe. Highest common factor or lowest common
15 denominator. *Journal for European Industrial Training*, Vol. 33, No 8/9, pp. 681-700.
16
17
18
19
20
21
22
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Developing vocational competences during secondary school?

Figure 1: Skills gained during the IBCP



Source: IBCP survey

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